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THESAURUS CONCHYLIIORUM,

OR

MONOGRAPHS

OF

GENERA OF SHELLS.

EDITED BY

ENTERED  
1847-1851  
G. B. SOWERBY, JUN., F.L.S.

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VOL. I.  
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# MONOGRAPHS

of Genera of Shells contained in the first volume of the  
'THESAURUS CONCHYLIIORUM.'

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\* \* \* In binding his own copy, the editor intends placing the plates in one cover, and the letter-press in another, and thinks the subscribers will find it most convenient to do the same.



## NOTICE.

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IN presenting this series of illustrated monographs to the public, the editor wishes to express his thanks to those friends who have assisted him by permitting the use of their specimens, and by drawing up those monographs which appear under their names. He is also grateful for the general support with which he has been honoured during the progress of the work. The difficulties experienced in collecting the necessary information, the great labour and expense of the illustrations, and the comparatively slow return of the capital employed, are the reasons for those long intervals between the appearance of the Parts, which have been so much complained of.

As the latter difficulty gradually gives way, the former will be overcome, as the editor will be enabled to give more time to the work, and to obtain increased assistance in the subordinate departments.

The editor having heard of those who would wish to possess the work, but are deterred from doing so on account of its slow appearance, begs to suggest that their subscriptions would contribute towards the removal of the evil which they deprecate. If a small number of additional subscribers were obtained; if a few of the more affluent subscribers would take a second copy; and others, by shewing the present volume to their friends, were to induce them to join in patronizing the undertaking, there would be no difficulty in producing the parts at short and regular intervals. Those who are anxious for such a result may promote it in this way.

As one effect of that increased support which has already commenced, it will be seen that in the latter Parts a larger number of plates has been given, and the letter-press has been fuller in proportion, than in the earlier Parts. It is intended to carry on the work in future on the same scale of increased liberality; and the editor cherishes a hope that the successful termination of the present volume will so far add to the list of subscribers as to enable him to proceed with greater rapidity with the successive monographs.

The '*Thesaurus Conchyliorum*' will in future be published at No. 70, Great Russell Street, Bloomsbury, to which place Mr. G. B. Sowerby, Sen., F.L.S., is removing his stock of Books, Minerals, Fossils, and Shells. Among the latter will be found many of the species described and figured only in the monographs, as well as others more generally known. G. B. Sowerby, Jun., having made arrangements to assist in the business, will be happy to supply the desiderata of those who may favour him and his father with their commands.

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## MONOGRAPH OF THE GENUS

### HELICINA.

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*Char. Gen.* Molluscum terrestre; testâ spirali, sub-globosâ; anfractibus quatuor ad sex; columellâ brevi; aperturæ margine interno sub-recto, margine externo plus minusve incrassato, reflexo.

Operculo concentrico, semi-lunari vel sub-quadrato, nucleo centrali.

This genus consists of heliciform land shells, with from four to six whorls, having the inner margin of the aperture nearly straight, and the outer lip generally thickened and more or less reflected. The operculum is concentric, having the nucleus near the centre, and of a semi-lunar or sub-quadrated form. The greater part are brought from the West Indies, many from South America, particularly Brazil, and a few from North America. Several new and interesting species have been lately brought from the Philippine Islands by Mr. Cuming. No species has yet been found in Europe. The species vary in form from the rounded globe to the depressed lens, and the whorls are either rounded or angular in the centre, generally smooth, more rarely ribbed in either direction. The inner lip is sometimes thickened near the columella, which is short, terminating sometimes in an angle, and sometimes in a point, with an incision behind it in the outer lip, and sometimes it is confluent with the outer lip. In attempting to arrange the various species according to their affinities with each other, it was found impossible to divide them into sections by any fixed and undeviating rule; in the following arrangement, therefore, we have been content to place together those species which most nearly resemble each other in groups, which may be imperfectly defined in the following manner:—

*Sec. 1. Lip thickened, sinuous, depressed at the base of the columella.*

*H. Aurantia*, Jamaicensis, hæmastoma, depressa, Aureola, striatula, solidula, Maugerix.

*Sec. 2. Shell thick, sub-angulated; a notch at the base of the columella.*

*H. Sagra*, sub-marginata, pulcherrima, festiva.

*Sec. 3. Shell more globose, thinner, notch deeper.*

*H. major*, Brownii, dentigera, hispida, minima.

Sec. 4. *Spirally ribbed or striated; outer lip diffuse; columella flattened or concave.*

*H. pulchella*, *Tankervillei*, *virginea*, *globosa*, *costata*.

Sec. 5. *Globose; outer lip confluent with the columella; inner lip thin.*

*H. zonata*, *lutea*, *variegata*, *neritella*, *picta*, *variabilis*, *Antillarum*, *occidentalis*. *Guadaloupensis*, *maculata*, *polita*, *similis*, *parva*, *globulosa*, *maxima*, *ambeliana*, *Zephyrina*, *pellucida*, *flavida*.

Sec. 6. *Columella as in Sec. 5; shell pyramidal.*

*H. Trochulina*, *conica*, *elongata*, *elegans*, *rupestris*, *Sloanii*.

Sec. 7. *Shell carinated; outer lip confluent with the columella.*

*H. acutissima*, *Trochiformis*, *Oxystoma*, *Carocolla*, *agglutinans*, *Lazarus*, *viridis*, *candeana*, *carinata*, *Rotella*, *pilosa*.

Sec. 8. *Shell depressed; columella angulated.*

*H. Rhodostoma*, *angulata*, *fulva*, *Brasiliensis*, *sylvatica*, *oresigena*.

Sec. 9. *Shell horny; columella rather angulated, or slightly notched; outer lip scarcely thickened.*

*H. orbiculata*, *cornea*, *castanea*, *nitida*, *rotunda*, *minuta*, *vestita*, *rugosa*.

## DESCRIPTIONS.

Sec. 1. *Lip thickened, sinuous, depressed at the base of the columella.*

Sp. 1. *H. AURANTIA*, (pl. i. f. 1, 2.) Gray, Zool. Journ. i. p. 69.

Testâ globosâ, lævi; labio externo reflexo, crasso, in medio sub-expanso, postice et antice depresso; labio interno crasso, expanso; columellâ latâ complanatâ.

The peritreme of this globular shell is generally of a light orange colour; it is thick, and the outer lip is depressed above, and at its union with the columella, which is broad and flattened.

Jamaica.

2. *H. JAMAICENSIS*, (pl. i. f. 3, 4.) nobis.

*T. H. aurantiæ* simillimâ, sed magis conicâ, et magis tenui; peritremate pallidiore, minùs incrassato.

More conical than the last, with the edge of the aperture thinner. It may be only a variety.

3. *H. HÆMASTOMA*, (pl. i. f. 5, 6. pl. iii. f. 98.) Moricand. Mem. Coq. terr. et. fluv. de Bahia.

*T. H. aurantiæ* simili, sed anfractibus supernè striatis; columellâ sub-angulatâ.

Our first two figures of this shell were copied from those given



by Moricand, but subsequently the kindness of Mr. Cuming enabled us to give f. 98. which is from a specimen. The species differs from *H. aurantia* in being slightly angulated at the columella and in not having the inner lip spread over the body whorl.

Antilles.

4. *H. DEPRESSA*, (pl. i. f. 47.) Gray, Zool. Journ. i. p. 70.

*T. albâ, lævi, depressâ, tenui; aperturâ transversim elongatâ; columellâ triangulari; labio externo depresso, supra infraque subdentato.*

White, smooth, depressed, thin; with a triangular columella; the outer lip thickened and sinuated above and below.

5. *H. AUREOLA*. (pl. i. f. 44, 45, 46.) Gray, Zool. Journ. i. p. 70.

*T. globosâ, minutè spiraliter striatâ; aperturâ sub-quadratâ, marginè lato, supra infraque unidentato.*

Shell globular, finely striated, with the aperture rather square, and the edge broad, with a tooth above and below; the last whorl contracted near the margin.

Jamaica.

6. *H. STRIATULA*. (pl. i. f. 43.) Sow. Jun. Zool. Proc. 1842.

*T. sub-depressâ, concentricè sub-striatâ, fulvo-rufescente, aperturâ sub-quadratâ, margine albo, crasso, reflexo, integro, sub-sinuato, posticè sub-depresso.*

A concentrically striated, sub-depressed shell, placed next to *H. aureola* on account of the margin being slightly bending and depressed, above and below.

Martinique.

7. *H. SOLIDULA*. (pl. ii. f. 52, 53, 54.) Gray. Beech. App.

*T. crassâ, depresso-conicâ; anfractibus carinatis; labio interno calloso, externo crasso, prope columellam sub-coarctato.*

Thick, conical, depressed; whorls with a central keel; inner lip thickened; outer lip thick, slightly contracted near the columella.

8. *H. MAUGERLE*. (pl. ii. f. 55.) Gray. Beech. App.

*T. crassâ, depressâ; anfractibus uni-carinatis; labio interno crasso, magno; columellâ angustatâ; labio externo crasso, supra infraque sub-emarginato.*

Thick, depressed; whorls angular and keeled; inner lip thick, columella terminating in a point; outer lip thick, slightly emarginated above and below, prominent in the centre.

**Sec. 2. Shell thick, sub-angulated, a notch at the base of the columella.**

9. *H. SAGRA*. (pl. i. f. 10. pl. iii. f. 126.) D'Orb. Moll. Cub. p. 240. *T. crassâ, conoideâ, subcompressâ, concentrice sub-striatâ; aperturâ subtriangulari, labio externo vix reflexo; prope columellam sub-emarginato; labio interno expanso, calloso, columellâ sub-complanatâ, acuminatâ; epidermide fuscâ, viridescente.*

Shell thick, conical, depressed, with the whorls angulated, the aperture rather triangular, the outer lip scarcely reflected, thickened within, inner lip thickened and spread widely over the under part of the last whorl.

Cuba.

10. *H. SUB-MARGINATA*. (pl. iii. f. 123 and 137.) Gray, Zool.

Journ. i. 68. *H. rubra*, Pfeiffer. *crassa*, D'Orb. Moll. Cub. p. 243.

*T. Sagrae* simili, sed magis depressâ, anfractu ultimo minori, magis rotundato.

Smaller and more globose than the last, with the last whorl smaller in proportion and less angulated, probably however only a variety of *H. Sagra*. Cuba.

11. *H. PULCHERRIMA*, Lea. (pl. i. f. 14.) Lea. obs.

*T. H. Sagrae* simili, sed magis globosâ, striis concentricis regularibus, distinctis.

Rather lighter and much more globose than the last, with the striae distinct and regular.

12. *H. FESTIVA*. (pl. i. f. 9.) Gray. Beech. App.

*T. H. Sagrae* simili, sed concentricè lirata, interstitiis rubro-lineatis.

Shaped like *Helicina Sagra*, but concentrically grooved, with the interstices coloured red. The figure is taken from Beechey's Appendix; we are inclined to think it over-coloured.

### Sec. 3. *Shell more globose, thinner, notch deeper.*

13. *H. MAJOR*. (pl. i. f. 12, 13.) Gray. Zool. Journ. i. 68.

*T. globosâ*, lævi, sub-tenui, anfractu ultimo magno; aperturâ semilunari; labio externo reflexo, expanso; prope columellam valdè emarginato; labio interno subtus leviter calloso; columellâ parvâ; operculo calcareo.

Shell rather thin, globose, the last whorl large, aperture semi-lunar, outer lip reflected, expanded, with a deep notch at the termination of the columella, inner lip expanded, slightly callous underneath, operculum shelly.

14. *H. BROWNII*. (pl. i. f. 7, 8.)

*T. globosâ*, tenui, anfractu ultimo magno; aperturâ semi-lunari; labio externo reflexo, paululum expanso; prope columellam incisurâ elongatâ; labio interno prope columellam sub-callosa; columellâ obliquâ, acutâ.

Globose, thin, shaped like *H. major*, but differing from that and all other species in the deep elongated incision at the base of the columella.

15. *H. DENTIGERA*. (pl. iii. f. 107, 108.) D'Orb. Moll. Cuba. p. 293.

*T. globosâ* sub-depressâ, albâ, labio externo paululum reflexo prope columellam emarginato; labio interno tenui; columellâ productâ, acutâ, dentem efformante.

A small white shell, shaped like the two last, with the outer lip slightly reflected and the notch as in *H. major*. Cuba.

16. *H. HISPIDA*. (pl. iii. f. 112, 113.) Pfeiffer. Weig. Arch. für Naturgesch. Band. i. 1839.

*T. globuloso-depressâ*, tenui, rufâ, hispidâ; anfractibus 4 convexiusculis; callo columellari tenui; angulo columellari dentem efformante; labro crassiusculo juxta dextram acutè inciso; aperturâ semi-lunari.



It is difficult to distinguish this from *H. dentigera*, the surface, however, is rather rougher, and the outer lip is scarcely reflected. Matanzas.

17. *H. MINIMA*. (pl. iii. f. 119.) D'Orb. Moll. Cub. p. 240.

*T. minutâ, H. dentigeræ simili, emarginatione minus validâ.*

A minute shell, somewhat resembling the *H. dentigera* in shape, but the last whorl larger in proportion, and the notch less distinct. Cuba.

Sec. 4. *Spirally ribbed or striated, outer lip diffuse, columella flattened or concave.*

18. *H. PULCHELLA*. (pl. i. f. 15, 16.) Gray, Zool. Journ. i. 64.

*T. conicâ, sub-angulatâ, spiraliter costatâ; costis distantibus, rugosis; labio externo expanso, reflexo; columellâ latâ, complanatâ.*

Conical, rather angulated, with rugose, distant ribs, in a spiral direction, with the outer lip expanded, reflected and confluent with the columella; columella broad, flattened.

19. *H. TANKERVILLII*. (pl. i. f. 17.) Gray, Zool. Journ. i. 250.

*T. H. pulchellæ simillimâ; sed majori; carinâ interruptâ, in medio anfractu ornâtâ.*

Very much like *H. pulchella*, but larger, with an interrupted keel, in the middle of the whorls.

20. *H. VIRGINEA*. (pl. i. f. 18. and pl. iii. f. 114.) Lea. Obs.

*T. H. pulchellæ simili, sed crassiori, costis magis numerosis; columellâ concavâ.*

Differing from *H. pulchella* in being thicker, having the ribs closer and more numerous, the outer lip less expanded above, and the columella rather hollow.

21. *H. GLOBOSA*. (pl. i. f. 24.) Gray Beech. App.

*T. formâ H. virgineæ simili, anfractibus suprâ costatis infrâ lævibus.*

In this species, the upper part of the whorls only are ribbed, the outer lip is less expanded, and the upper part of the whorl more elevated than in *H. virginea*.

22. *H. COSTATA*. (pl. i. f. 20.) Gray Zool. Journ. i. 66

*T. minutâ, H. virgineæ simili, sed costis paucis; columellâ angustiori; labio externo vix expanso.*

A minute shell, resembling *H. virginea* in shape, but with the ribs larger and fewer in proportion, the outer lip scarcely expanded and the columella narrower.

Sec. 5. *Globose; outer lip confluent with the columella; inner lip thin.*

23. *H. ZONATA*. (pl. ii. f. 62, 63, 64.) *H. fasciata, H. flava, Spix; H. variabilis, Wagner.*

*T. conicâ, sub-rhomboideâ, leviter spiraliter costatâ; anfractibus angulatis, unicarinatis; carinâ alterâ, plus minusve distinctâ infra angulum; aperturâ sub-quadratâ; labio externo expanso, supernè depresso in medio attenuato, ad columellam sub-angustato.*

Conical, obscurely ribbed on the upper part of the whorls, with a blunt keel on the angle, and another more or less distinct below; outer lip expanded in the centre and lower part, confluent with the columella, operculum horny. Of the synonyms quoted above, *fasciata* and *variabilis* were pre-occupied, *flava* was given to one of the varieties on the supposition of its being a distinct species, and on that account is thought unsuitable. Common in woods, upon trees and green leaves, in Bahia.

24. *H. LUTEA*. (pl. ii. f. 59. and pl. iii. f. 142.)

T. globosâ, sub-angulatâ, lævi; labio externo paululum expanso, vix incrassato; labio interno leviter incrassato.

Resembling the last in general form, but smooth, with the outer lip scarcely reflected; the inner lip slightly thickened; the colour varies from light yellow to dark brown, operculum horny.

Antilles.

25. *H. ADSPERSA*. (pl. iii. f. 103, 115, 124, 125.) Pfeiffer. Wieg. Arch. für Naturgeschichte. Band i. 1839. *H. variegata*, D'Orb. Moll. Cub. p. 242. var. *H. ornata*, Fer. marmorata, D'Orb.

T. globosâ, lævi; anfractibus rotundatis; prope suturam elevatis; aperturâ semi-lunari; labio externo expanso, postice depresso; columellâ parvâ.

Globose, smooth; whorls round, elevated near the suture; aperture semi-lunar; outer lip expanded, the upper part depressed; columella small. Varieties occur as follows,—yellow, yellow banded with brown, brownish white with broad brown bands, brownish white with brown bands and spots between; the last variety being named *picta* by Pfeiffer. Callajabas, Cuba, Matanzas.

26. *H. NERITELLA*. (pl. ii. f. 72 to 75.) Lamarck. *Gray Zool. Journ.*

T. *H. variegatæ* simili, sed magis depressâ; anfractibus minus distinctis; labio externo magis expanso et reflexo.

This shell resembles the last; it, however, is more compressed, the upper part of the whorls are less elevated, the outer lip and columella more flattened and expanded.

West Indies.

27. *H. PICTA*. (pl. ii. f. 56. and pl. iii. f. 140, 141.) Ferussac. *Fasciata*, Lamarck?

T. depressâ, lævi; anfractu ultimo magno; labio externo sub-expanso; columellâ obliquâ, confluenti.

Depressed, smooth, with the last whorl large; the outer lip rather expanded and obliquely confluent with the columella. Colours varying, but generally arranged in bands. This is the shell which Gray has figured as *H. fasciata*, Lam. Its identity, however, appearing doubtful, we have applied the name given by De Ferussac.

Martinique and Jamaica.

28. *H. VARIABILIS*. (pl. ii. f. 57, 58, and pl. iii. 106, 109, 129.) Guild. *Zool. Journ.*

T. *H. PICTÆ* simili, sed anfractu ultimo minori.



The principal difference between this and the last species, is, that the whorls increase more gradually in size; the outer lip is also generally more thickened on the outside; the colours of this species vary considerably and are arranged in bands as in the last.

West Indies.

29. *H. ANTILLARUM.* (pl. ii. f. 68, 69, 70.)

*T. depressâ, magnâ, tenui, leviter striatâ; anfractu ultimo magno; labio interno tenui, prope columellam paululum incrassato; columellâ rotundatâ, angustâ, obtusissime angulatâ; labio externo expanso, reflexo, postice sub-depresso.*

Depressed, large, thin, very finely striated; last whorl large; inner lip thin, swelled near the columella; columella rounded, narrow, obtusely angulated at its union with the outer lip, which is thickened, expanded, and reflected. The commonest variety is coloured with brown mottled bands on a light ground; another variety is of a uniform light green, and a third purplish brown; in an individual of the last, a very obtuse keel is to be traced in the centre of the whorl.

Antilles.

30. *H. OCCIDENTALIS,* (pl. ii. f. 86 and 87.) *Guild. Zool. Journ.* iii. p. 529.

*T. depressâ, reticulatâ; obsoletissime carinatâ; columellâ rotundatâ; labio externo expanso, reflexo; operculo corneo.*

Depressed, reticulated, very obscurely carinated, or rather angulated; columella rounded, passing smoothly and obliquely into the outer lip, which is expanded, reflected, and rather depressed above; operculum horny.

West Indies.

31. *H. GUADALOUPENSIS.* (pl. ii. f. 65, 66,) nobis. *Zool. Proc.* 1842.

*T. depressâ, sub-angulatâ, concentricè leviter striatâ; columellâ ad basin sub-nodosâ; labio externo crasso, reflexo; anfractibus gradatim crescentibus, supra infraque sub-ventricosus; operculo fusco, corneo.*

This shell is rather thicker and more depressed than the last, the whorls more gradually increasing, and the outer lip less expanded.

Guadaloupe and the Antilles.

32. *H. MACULATA.* pl. iii. f. 131).

*T. trapezoideâ, sub-angulatâ, suprâ infrâque conicâ, lævi, tenui, rubro-fasciatâ et maculatâ; labio externo reflexo, sub-expanso, ad basin columellæ tenui; columellâ sub-callosâ, ad basin attenuatâ; operculo corneo.*

Several varieties of this pretty little shell were kindly communicated by M. D'Orbigny, and, no name being attached to them, I have ventured to give it the above, regretting, however, that time would not allow of a previous communication with their possessor. This species is more angular than the preceding, and conical above and below. There are several varieties, mottled and banded, with red or brown, on a pink or yellowish ground.

South America.

33. *H. POLITA*, (pl. ii. f. 76 to 81.) nobis. Zool. Proc. 1842.

*T. politâ*, tenui, pellucidâ, plus minusve depressâ et angulatâ; anfractibus supra sub-complanatis, infra ventricosus; labio interno tenui, anticè paululùm inflato; columellâ angustatâ ad basin leviter angulatâ; labio externo tenui, expanso, reflexo, supra angulum plus minusve depresso; operculo internè rubro, externe sub-margaritaceo.

Smooth, thin, transparent, more or less depressed and angulated; the whorls rather flattened above; rather more ventricose beneath; inner lip thin, rather swelled near the columella; columella narrow, rather angulated at the base; outer lip thin, expanded, reflected, more or less depressed above the angle; operculum red within, pearly without, rather square. The principal varieties in size and colour are shown in the plates. Brought by Mr. Cuming from the Philippine Islands.

34. *H. SIMILIS*. (pl. iii. f. 130.) nobis. Zool. Proc. 1842.

*T. formâ H. politæ simillimâ*, sed magis angulatâ, et leviter striatâ.

Presenting a medium between *H. Guadaloupensis* and *H. polita*, from the latter of which it differs in being lightly striated, and rather more angular.

Guadaloupe.

35. *H. PARVA*. (pl. ii. f. 82.) nobis. Zool. Proc. 1842.

*T. H. politæ simillimâ*, sed minori, magis globosâ, et labio externo vix reflexo.

Between the more globose and small varieties of *polita*, and this shell, it is difficult to recognise the distinction, which, however consists partly in the shape, and partly in the outer lip being less reflected.

Philippine Islands.

36. *H. GLOBULOSA*. (pl. iii. f. 127, 128.) D'Orb. Moll, Cub. p. 294.

*T. globosâ*, lævi, sub-tenui; labio externo sub-expanso, reflexo; columellâ acutâ.

Globose, smooth, rather thin; outer lip rather expanded, reflected; columella acute.

Cuba.

37. *H. MAXIMA*. (pl. i. f. ii.) Zool. Proc. 1842.

*T. globoso-sub-depressâ*, lævi, albâ; aperturâ magnâ, semilunari, margine reflexo, acuto; labio interno sub-crasso; columellâ obtusè angulatâ.

Rather more depressed than *H. major*, and the base of the columella angulated instead of being notched.

38. *H. AMBELIANA*. (pl. i. f. 19, 26.) De Roissy, Guérin. Mag. Zool, Cl. v. pl. 68.

*T. conicâ*, lævi, spiraliter tenuissimæ striatâ; aperturâ semilunari; labio externo crasso, reflexo, rotundato; operculo corneo.

Rather conical, globose, nearly smooth, with the aperture semilunar, and the outer lip thickened, reflected and rounded; operculum horny. Our shell, which has been named *Texasiana* and *Bolanderiana*, in manuscript, agrees better with the figure published in Guérin than with the accompanying description.

Antilles and Texas.

39. *H. ZEPHYRINA*. (pl. i. f. 25, 27. pl. iii. f. 118.) Duclos Guerin Mag. Zool.

T. globosâ sub conicâ, lævi, tenui; labio externo reflexo; columellâ obliquè attenuatâ.

Globose, rather conical, smooth, thin; outer lip reflected, columella obliquely attenuated. Figure 118 is a more conical variety. Cuba.

40. *H. PELLUCIDA*. (pl. iii. f. 138.)

T. *H. Zephyrinæ* simili, sed columellâ pœne rectâ, sub angulatâ.

A more transparent shell than the preceding, with the columella nearly straight, and joining the outer lip at an angle.

French Guiana.

41. *H. FLAVIDA*. (pl. iii. f. 117, 134.) Menke, Syn. Moll. Pyrimontis 1830. p. 132.

T. trochiformi, sub-crasso; labio externo crasso, reflexo, rotundato.

A smaller shell than *H. Zephyrina*, with the outer lip thickened reflected, and rounded.

Sec. 6. *Columella like the last, shell pyramidal.*

42. *H. TROCHULINA*. (pl. iii. f. 105.) D'Orb. Moll. Cub. p. 249.

T. trochiformi, sub-angulatâ; labio externo paululum incrassato, vix reflexo.

Trochiform and slightly angulated; outer lip very slightly thickened, scarcely reflected. Cuba.

43. *H. PYRAMIDALIS* (pl. iii. f. 104.) *H. CONICA*. D'Orb. Moll. Cub. p. 249.

T. formâ *H. Trochulinæ* simili, sed majori; labio externo incrassato, in medio sub-expanso.

Larger than *H. Trochulina*, with the outer lip thickened, and expanded in the centre. The name given by D'Orbigny was previously occupied. Cuba.

44. *H. ELONGATA*. (pl. iii. f. 110.) D'Orb. Moll. Cub. p. 291.

T. conicâ, elongatâ, angulatâ, lævi; aperturâ semi-lunari; labio externo latè expanso, in medio producto, ad basin columellæ angustato; operculo corneo.

Another conical species, longer than the last. The outer lip is expanded and broad, particularly in the centre, where it is bent forwards; near the columella it is extremely thin. The shelly operculum fits on the margin of the aperture. Cuba.

45. *H. CONICA*. (pl. iii. f. 101.) Pfeiffer. Wiegmann Archiv für Naturgesch. Band i. 1839. *H. elegans*, D'Orb. Moll. Cub. p. 290.

"T. conicâ, acuminatâ, subtus convexiusculâ, pallide rufâ; anfr. 6 planiusculis, spiraliter confertim striatis; ultimo spiram sub-æquante, ad basin sub-angulato; callo columellari angusto; labio albo, expanso, acuto; aperturâ integrâ, sub-triangulari." Operculo testaceo, pallido.

Conical, very finely striated in both directions; whorls nearly



round; outer lip widely expanded, flat, narrow at the base of the columella. Matanzas, Cuba.

46. *H. RUPESTRIS* (pl. iii. f. 120.) Pfeiffer. Wiegmann Arch. für Naturgesch. Band i. 1839.

"*T. conicâ, subtus convexiusculâ, vitreâ, spiraliter striatâ; anfract. 5 disjunctis, ultimis sub-angulatis; callo columellari obsoleto; aperturâ integrâ, ovatâ.*" Operculo tenuissimo, flavo.

A small yellow conical shell, slightly striated in both directions, the aperture somewhat square, the outer lip scarcely reflected, and the operculum fitting to the margin. Matanzas.

47. *H. SLOANII*. (pl. iii. f. 102.) D'Orb. Moll. Cub. p. 248.

*T. trochiformi, angulatâ, sub-carinatâ; striis spiralibus, distantibus, cinctâ, labio externo reflexo; operculo corneo.*

Trochiform, angulated, with an obtuse keel in the centre of the whorls, and distant, spiral striæ; outer lip reflected; operculum horny. Cuba.

Sec. 7. *Shell carinated, outer lip confluent with the columella.*

48. *H. ACUTISSIMA* (pl. ii. f. 92 to 95, and pl. iii. f. 133.) nobis, Zool. Proc. 1842.

*T. plus minusve depressâ, concentricè leviter striatâ, angulari, acutissime carinatâ; infrâ angulum paululum complanatâ; aperturâ triangulari; labio interno tenuissimo; columellâ sub-complanatâ; ad basin sub-undatâ; labio externo acuto, validè reflexo, expanso, supra angulum sub-depresso.*

More or less depressed, concentrically and finely striated, angular, very sharply keeled, rather flattened under the angle; aperture triangular; inner lip very thin; columella rather flattened, rather undulated at the base; outer lip sharp, widely reflected and expanded, above the angle rather depressed. Varies much in colour, as will be seen in the figures. Brought by H. Cuming from the Philippine Islands.

49. *H. TROCHIFORMIS*. (pl. ii. f. 90.) nobis, Zool. Proc. 1842.

*T. luteâ, Helicinæ acutissimæ simillimâ, sed spirâ altiori.*

It differs from *acutissima* in being more conical. Found on the leaves of palms, or on mountains in the Isle of Negros by H. Cuming.

50. *H. OXYSTOMA*. (pl. iii. f. 139.) Gray, Beech, App.

*T. H. acutissimæ simili, sed crassiori; labio interno valido.*

Not having seen the shell, we are uncertain of its distinctness; it appears from the figure, however, to be more solid and more distinctly conical than *H. acutissima*, with the inner lip thickened.

Bahia.

51. *H. CAROCOLLA*. (pl. ii. f. 88, 89.) Moricand. Mem. Coq. terr. et fluv.

*T. depressâ, conicâ, tenuissimè decussatâ; anfractibus angulatis, in medio carinatis, suprâ et infrâ paululum inflatis; aperturâ sub-trapezoidali; columellâ sub-callosâ; labio externo valide expanso, reflexo, in medio sub-attenuato.*

Depressed, conical, finely striated in both directions; whorls angulated, with a keel in the middle, above and below which they are slightly rounded; aperture rather trapezoidal; columella slightly callous, making a rounded outline at its union with the outer lip; outer lip much expanded, strongly reflected, and lengthened at the angle. Almada.

52. *H. AGGLUTINANS*. (pl. ii. f. 83, 84, 85.) nobis. Zool. Proc. 1842.

*T. depressâ, angulatâ, obtusè carinatâ, supra infraque æqualiter convexâ, minutè concentricè striatâ, aperturâ quadrilaterali; labio interno tenuissimo; columellâ triangulari, complanatâ, sub-umbilicatâ, ad basin obtusè angulatâ; labio externo effuso, reflexo, postice leviter depresso; operculo sub-crasso, irregulariter quadrilaterali; epidermide aliquando, per adhesionem rupium particularum in carinam latam præruptam productâ.*

This shell is found on rocks, the decomposed particles of which are agglutinated to the epidermis in some specimens so as to form a broken keel on the angle of the whorls. Found by Mr. H. Cuming in the Philippine Islands.

53. *H. LAZARUS*. (pl. ii. f. 91.) nobis. Zool. Proc. 1842.

*T. H. agglutinanti simillimâ, sed magis elevatâ, columellâ angustiori.*

Very much like *H. agglutinans*, but more elevated and the columella narrowed. Taken on the leaves of palms by Mr. Cuming in the island of Luzon, Philippines.

54. *H. VIRIDIS*. (pl. ii. f. 67.) Lam. Hist. Nat. vi. 103.

*T. lævi, tenui; anfractibus angulatis, carinatis, suprâ et infrâ rotundatis; labio externo tenui, expanso; columellâ sub-callosâ.*

Our figure is taken from the Zoological Journal. The specimen cannot now be found.

55. *H. CANDEANA*. (pl. iii. f. 97, 99.) D'Orb. Moll. Am. Mer. No. 17.

*T. depressâ, lævi; anfractibus angulatis in medio valde carinatis; labio externo expanso, reflexo, in medio sub-acuminato, attenuato; operculo corneo.*

This shell resembles *H. Carocolla*, but is smooth, with the outline rather more rounded, the outer lip less expanded, and pointed upwards in the centre. Bay of Honduras.

56. *H. CARINATA*. (pl. ii. f. 60. and pl. iii. f. 96.) D'Orb. Moll. Am. Mer. p. 360.

*T. formâ H. Candeanæ simili, spiraliter obsolete distanter striatâ; columellâ sub-complanatâ, triangulari; labio externo crasso, rotundato; carinâ obsoletâ, infra carinam centrali; operculo corneo.*

Like *H. Candeanæ* in form; spirally, obsoletely and distantly striated; columella rather flattened, triangular; outer lip thick, rounded; with an obsolete keel under the central one; operculum horny. Brazil.

57. *H. ROTELLA*. (pl. iii. f. 135, 136.)

*T. lævi*, angulatâ, vix carinatâ; labio externo reflexo; labio interno expanso; columellâ sub-angulatâ.

Shaped like the last, but small, smooth, with the outer lip very little spread, and the inner lip expanded. We have figured a yellow and a brown variety.

58. *H. PILOSA*. (pl. iii. f. 121, 122.) nob. Zool. Proc. 1842.

*T. parvâ*, corneâ, angulatâ, supra angulum distanter spiraliter striatâ, labio externo vix reflexo; epidermide ad angulum in carinam pilosam productâ.

A small, brown, horny, angulated shell, smooth below the angle, with three or four spiral grooves above; the epidermis is produced into a broad keel or fringe at the angle of the whorls. Ópara.

Sec. 8. *Shell depressed, columella angulated.*

59. *H. RHODOSTOMA*. (pl. ii. f. 71.) Gray. Z. J. i. 68.

*T. angulatâ lævi*, carinatâ; labio externo valide reflexo, complanato, lato; columellâ supra callosâ, ad basin productâ, acuminatâ.

Angulated, smooth, carinated; outer lip reflected, flattened and broad; columella callous above, produced into a point at the base.

60. *H. ANGULATA*. (pl. ii. f. 61. and pl. iii. f. 100.) nob. Zool. Proc. 1842.

*T. conicâ*, spiraliter striatâ; anfractibus supra et infra sub-inflatis, in medio carinatis, labio externo reflexo, rotundato, supra angulum sub-depresso; columellâ sub-rectâ, ad basin angulatâ; operculo corneo.

Conical, spirally grooved; with the whorls rather inflated above and below the angle, keeled in the centre; outer lip rather rounded, its outline more inflated below than above the angle; columella sharply angulated; operculum horny. The general colour of this shell is whitish yellow, the operculum is red, and there is a red line within the outer lip. Brazil.

61. *H. FULVA*. (pl. i. f. 23.) D'Orb. Moll. Am. Mer. p. 398.

*T. sub-angulatâ*, spiraliter striatâ; columellâ triangulari, ad basin angulatâ; labio externo reflexo; operculo calcareo.

Rather angulated, spirally grooved; columella triangular, pointed at the base; outer lip reflected; operculum calcareous. Bolivia.

62. *H. BRASILIENSIS*. (pl. i. f. 29.) Ferussac.

*T. H. fulvæ* simillimâ, sed aperturâ sub-quadratâ; columellâ rectâ, angustatâ.

Very much like the last, but with the aperture rather square; columella straight and narrow, with a triangular space behind it. Rio de Janeiro, Brazil.

63. *H. SYLVATICA*. (pl. i. f. 30.) D'Orb. Moll. Am. Mer. p. 399.

*T. H. fulvæ* simili, sed leviori, spirâ magis elevatâ.

This shell is smooth excepting immediately under the centre



of the whorls where it is slightly striated, the lip is not much thickened, and the spire is more elevated than in *H. fulva*, which in other respects it resembles. Bolivia, South America.

64. *H. ORESIGENA*. (pl. i. f. 28.) D'Orb. Moll. Am. Mer. p. 399.

*T. H. fulvæ* simillimâ, sed labio externo vix expanso; sub-reflexo, columellâ angustiori.

The outer lip and columella of this species are narrower than in *H. fulva*, and the shell is rather more depressed. Bolivia.

Sect. 9th. *Shell horny; columella rather angulated, or slightly notched; outer lip scarcely thickened.*

65. *H. ORBICULATA*. (pl. i. f. 33,34.) *Oligyra orbiculata*, Say. Zool. Journ. i. 70.

*T. parvâ*, globosâ, depressâ, concentricè tenuissimè striatâ; labio interno sub-callosa; columellâ obliquâ, sub-angulatâ; labio externo tenui, sub-reflexo.

Small, globose, depressed, concentrically and very finely striated; inner lip rather callous; columella oblique, rather angulated; outer lip thin, a little reflected. North America.

66. *H. CORNEA*. (pl. i. f. 35, 36.)

*T. H. orbiculatæ* simillimâ, sed crassiori; labio externo ad basin columellæ sub-emarginato; columellâ callosâ.

Thicker and darker than *H. orbiculata*, rather less depressed with the columella and the lower part of the inner lip callous, and the outer lip very slightly notched behind the columella.

67. *H. CASTANEA*. (pl. i. f. 31, 32.) Guilding?

*T. H. orbiculatæ* simili, sed lævi, depressâ; labio externo tenui.

Like *H. orbiculata*, but smooth and depressed; outer lip thin. North America.

68. *H. NITIDA*. (pl. iii. f. 116.) Pfeiffer, Wiegmann Archiv für Naturgesch. Band i. 1839.

"*T. sub-depressâ*, tenui, glabrâ, saturate incarnatâ, supra subtus-que convexiusculâ, apice mucronato, anfractibus 5, ad suturam minutissimè striatis; columellâ vix callosâ; labio simplici, acuto, sinuato, ad angulum columellarem acutè dentato."

Differing from *H. castanea* in having a sinuosity in the upper part of the outer lip, which is slightly thickened. Matanzas.

69. *H. ROTUNDA*. (pl. iii. f. 111.) D'Orb. Moll. de Cub. p. 292.

*T. globosâ*, conicâ, nitidâ, tenui; labio externo tenui, supernè sinuato, depresso.

Globose, conical, shining, thin; outer lip thin, the upper parts sinuated and slightly depressed. Cuba.

70. *H. MINUTA*. (pl. i. f. 40, 41.) nobis. Zool. Proc. 1842.

*T. parvâ*, depressâ, sub-angulatâ, rubrâ vel stramineâ; margine crasso, effuso; labio interno calloso; columellâ ad basin sub-emarginatâ.

More angular and more depressed than *H. orbiculata*, and slightly striated.

71. *H. VESTITA* (pl. i. f. 42.) Guild. M. S.

*T. globosâ, tenui, concentricè lyratâ, parvâ; aperturâ semi-lunari; labio externo tenui.*

Globose, thin, concentrically ribbed, small; aperture semi-lunar; outer lip thin. North America.

72. *H. RUGOSA*. (pl. iii. f. 132.) Pfeiffer. Wiegmann Archiv. für Naturgesch. Band i. 1839.

"*T. depressâ, subtus convexiusculâ, rubello-succineâ; anfract. 5, elegantissimè obliquè rugosis; callo columellari tenui, albido; labro albido, incrassato, prope angulum columellarem sub-dentato; aperturâ ovatâ.*"

Concentrically ribbed, like *H. vestita*, but depressed, with the margin of the aperture thickened, and slightly angulated at the base of the columella.

The author is unable to identify the following, the figures of which are copied from the works referred to.—

73. *H. substriata* (pl. i. f. 22.) Gray Zool. Journ. i. p. 66. W. I.

74. — *unifasciata* (pl. i. f. 21.) Gray Zool. Journ. i. p. 69.

75. — *flammeata*. (pl. i. f. 37, 38, 39.) Quoi. Voy. Astr.

76. — *tæniata*. (pl. ii. f. 49, 50, 51.) Ib.

77. — *lens*. (pl. i. f. 48.) Lea. Obs.

— *striata*. Lam. Hist. Nat. vi. p. 183.

— *sordida*. King. Zool. Journ.

## EXPLANATION OF THE PLATES.

### HELICINÆ.

*Figures of the natural size.*

- |                                 |                                   |
|---------------------------------|-----------------------------------|
| 1. <i>H. Aurantia</i> . Sp. 1.  | 19. <i>H. ambeliana</i> . 38.     |
| 2. — — — — —, var.              | 20. — <i>costata</i> . 22.        |
| 3. — <i>Jamaicensis</i> . 2.    | 21. — <i>unifasciata</i> . 74.    |
| 4. — — — — —, var.              | 22. — <i>sub-striata</i> . 73.    |
| 5. — <i>hæmastoma</i> . 3.      | 23. — <i>fulva</i> . 61.          |
| 6. — — — — —, var.              | 24. — <i>globosa</i> . 21.        |
| 7. — <i>Brownii</i> . 14.       | 25. — <i>Zephyrina</i> . 39.      |
| 8. — — — — —, var.              | 26. — <i>ambeliana</i> . 38.      |
| 9. — <i>festiva</i> . 12.       | 27. — <i>Zephyrina</i> , var. 39. |
| 10. — <i>Sagra</i> . 9.         | 28. — <i>oresigena</i> . 64.      |
| 11. — <i>maxima</i> . 37.       | 29. — <i>Brasiliensis</i> . 62.   |
| 12. — <i>major</i> . 13.        | 30. — <i>sylvatica</i> . 63.      |
| 13. — — — — —, var.             | 31. — <i>castanea</i> . 67.       |
| 14. — <i>pulcherrima</i> . 11.  | 32. — <i>castanea</i> .           |
| 15. — <i>pulchella</i> . 18.    | 33. — <i>orbiculata</i> . 65.     |
| 16. — — — — —, var.             | 34. — <i>orbiculata</i> .         |
| 17. — <i>Tankervillei</i> . 19. | 35. — <i>cornea</i> . 66.         |
| 18. — <i>virginea</i> . 20.     | 36. — — — — —                     |

37. H. }  
 38. — } flammeata, 3 views. 75.  
 39. — }  
 40. — minuta. 70. *magnif.*  
 41. —  
 42. — vestita. 71.  
 43. — striatula. 6.  
 44. — Aureola. 5.  
 45. — —, var.  
 46. — —, var.  
 47. — depressa. 4.  
 48. — lens. 77. *magnif.*  
 49. — }  
 50. — } tæniata. 3 views. 76.  
 51. — }  
 52. — solidula. 7.  
 53. — —, var.  
 54. — —, var.  
 55. — Maugeriae. 8.  
 56. — picta. 27.  
 57. — variabilis. 28.  
 58. —  
 59. — lutea. 24.  
 60. — carinata. 56.  
 61. — angulata. 60.  
 62. — zonata. 23.  
 63. — —, var.  
 64. — —, var.  
 65. — Guadeloupensis. 31.  
 66. — —, var.  
 67. — viridis. 54.  
 68. — Antillarum. 29.  
 69. —  
 70. —  
 71. — Rhodostoma. 59.  
 72. — neritella. 26.  
 73. —  
 74. —  
 75. —  
 76. — polita. 33.  
 77. —  
 78. —  
 79. —  
 80. —  
 81. —  
 82. — parva. 35.  
 83. — agglutinans. 52.
84. H. agglutinans.  
 85. —  
 86. — occidentalis. 30.  
 87. — occidentalis.  
 88. — Carocolla. 51.  
 89. —  
 90. — Trochiformis. 49.  
 91. — Lazarus. 53.  
 92. — acutissima. 48.  
 93. —  
 94. —  
 95. —  
 96. — carinata, var. 56.  
 97. — candeana. 55.  
 98. — hæmastoma. 3.  
 99. — candeana. 55.  
 100. — angulata. 60.  
 101. — conica. 45.  
 102. — Sloanii. 47.  
 103. — adpersa. 25.  
 104. — pyramidalis. 43.  
 105. — Trochulina. 42.  
 106. — variabilis. 28.  
 107. — dentigera. 15.  
 108. —  
 109. — variabilis. 28.  
 110. — elongata. 44.  
 111. — rotunda. 69.  
 112. — hispida. 16.  
 113. —  
 114. — virginea, var. 20.  
 115. — adpersa. 25.  
 116. — nitida. 68.  
 117. — flavida. 41.  
 118. — Zephyrina. 39.  
 119. — minima. 17. *magnif.*  
 120. — rupestris. 46. *magnif.*  
 121. — pilosa. 58.  
 122. —  
 123. — sub-marginata. 10.  
 124. — adpersa. 25.  
 125. — adpersa.  
 126. — Sagra. 9.  
 127. — globulosa. 36.  
 128. — globulosa. 36.  
 129. — variabilis. 28.  
 130. — similis. 34.



131. *H. maculata*. 32.  
132. — *rugosa*. 72.  
133. — *acutissima*. 48.  
134. — *flavida*. 41.  
135. — *Rotella*. 57.  
136. — ———

137. *H. sub-marginata*. 10.  
138. — *pellucida*. 40.  
139. — *Oxystoma*. 50.  
140. — *picta*. 27.  
141. — ———  
142. — *lutea*. 24.

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## MONOGRAPH OF THE GENUS P U P I N A .

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*Char. Gen.* Molluscum terrestre; testâ sub-cylindricâ, vitreâ, nitidissimâ; anfractibus quinque ad sex, penultimo inflato, ultimo paululum coarctato; aperturâ circulari, margine crasso, reflexo, ad basin columellæ inciso vel emarginato; operculo corneo, spirali.

A genus of small pupiform land shells, with a round spiral operculum, generally having an incision at the base of the columella; differing from those species of *Cyclostoma* which are similarly shaped and which have a similar incision, in the glassy enamel which covers the shell, and fills up the suture of the spire.

The first species described under this generic name was *P. Keraudrenii*, published by Vignard, in the "Annales des Sciences." 1829. Mr. Grateloup subsequently described *P. Nunezii* under the generic name *Moulinisia*, neither of these naturalists being acquainted with the operculum. All the species here described, with the exception of *P. humilis* and *P. Keraudrenii*, were recently brought to this country by Mr. Cuming from the Philippines.

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### DESCRIPTIONS.

#### Sec. 1. *The axis of the spire turned backwards.*

Sp. 1. *P. NUNEZII* (pl. iv. f. 8, 9, 10, 11.) *Moulinisia Nunezii*, Grateloup. Ann. Soc. Linn. Bordeaux, 1840.

T. globosâ, obliquâ; aperturâ magnâ, margine validè expanso, reflexo, complanato, incisurâ triangulari penitus diviso; labio columellari concavo; anfractu ultimo prope aperturam sub-complanato.

Obliquely globose, with the aperture large; the margin reflected; expanded, flattened; notch deep and triangular, nearly dividing the peritreme; the last whorl rather flattened in front. Varying from bright orange to purplish cream colour and dark brown. Found on leaves of small plants and low bushes in several of the Philippine Islands.

2. *P. PELLUCIDA* (pl. iv. f. 18, 19, 20.) Zool. Proc. 1842.

T. obliquâ, sub-globosâ, pellucidâ; spiræ axe validè retrorso; anfractu penultimo elevato, ultimò complanato margine reflexo, incisurâ diviso; columellâ latâ, convexâ.

Smaller, more transparent, and with the spire more bent than the last; the outer lip less expanded, the notch completely dividing the peritreme, and the columella convex. Found on small plants in woods, in the Philippine Islands.

Sec. 2. *Spire nearly straight.*

3. *P. LUBRICA.* (pl. iv. f. 12 to 16.) nobis. Zool. Proc. 1842.

T. sub-obliquâ, cylindricâ; spirâ brevi obtusâ; aperturâ rotundatâ; margine anticè sub-expanso, paululùm incrassato, ad basin columellæ vix emarginato; columellâ callosâ.

In this species the notch is scarcely perceptible, and there is a rounded callosity behind the columellar lip. The inner lip is thickened on the body whorl. Found in dense woods on small plants in the Philippine Islands.

4. *P. VITREA.* (pl. iv. f. 6, 7) nobis. Zool. Proc. 1842.

T. sub-elongatâ, rectâ; anfractibus sub-rotundatis, margine expanso, reflexo, complanato, incisurâ diviso.

The spire is straight and elevated, gradually tapering towards the obtuse apex; the peritreme is expanded and flattened, the notch deep. Mindinao and Luzon, Philippines.

5. *P. SIMILIS.* (pl. iv. f. 4, 5.) nobis. Zool. Proc. 1842.

T. fulvâ, sub-elongatâ, rectâ; anfractibus sub-rotundatis; margine pallidè fulvo, expanso, reflexo, rotundato, crasso; incisurâ usque ad dorsum diviso.

Resembling *P. vitrea*, but the margin not flattened, and the notch so deep that it is seen at the back of the shell. Found on leaves of bushes and trunks of trees in the Island of Luzon, Philippines.

6. *P. EXIGUA.* (pl. iv. f. 17.) nobis. Zool. Proc. 1842.

T. parvâ, translucidâ, albâ, cylindricâ; anfractu penultimo inflato; margine aperturæ paululùm incrassato, incisurâ diviso.

This small, transparent white species has the margin very little thickened, and the notch deep. Found on small plants in the Philippine Islands.

Sec. 3. *Spire straight, with a notch at both ends of the aperture.*

7. *P. HUMILIS.* (pl. iv. f. 2.) Jacquenot.

T. ovali, solidâ, pallidè luteâ; anfractibus sub-rotundatis, ultimo propè aperturam paululùm complanato; aperturâ rotundatâ, margine crasso, expanso, reflexo; labio interno crasso, posticè plicato; columellâ crassâ, latâ, tortuosâ, reflexâ; incisurâ ad dorsum litâ.

This being a dead shell has lost the brilliancy of the enamel. The teeth or folds at the posterior part of the inner and outer lips form a very distinct canal. The columella is tortuous and turned backwards, and the notch is seen at the back like the corresponding part of a *Buccinum*.



8. *KERAUDRENI*. (pl. iv. f. 2.) Vignard.

*T.* parvâ, cylindricâ, griseâ, rufescente; spirâ obtusâ, rectâ; aperturâ parvâ, margine incisurâ diviso; labio externo levitèr incrassato, posticè sub-plicato; labio interno plicato.

A pupiform species with a posterior canal.

Manilla and Singapore.

9. *P. BICANALICULATA*. (pl. iv. f. 1.) nobis. Zool. Proc. 1842.

*T.* parvâ, ovali, albâ, translucidâ; anfractibus ventricosus; aperturâ magnâ, margine sub-expanso, sub-incrassato, ad basin columellæ inciso; labio interno posticè plicato.

This species differs from *P. Keraudrenii* in shape, being more ventricose, having a tapering spire, and a very strong fold on the inner lip. Found on small plants in the island of Zebu, Philippines.

## EXPLANATION OF PLATE IV.

## PUPINÆ.

- |                                      |                                     |
|--------------------------------------|-------------------------------------|
| 1. <i>P. bicanaliculata</i> . Sp. 9. | 11. <i>P. bicanaliculata</i> . var. |
| 2. — <i>humilis</i> . 7.             | 12. — <i>lubrica</i> . 3.           |
| 3. — <i>Keraudrenii</i> . 8.         | 13. — ———, var.                     |
| 4. — <i>similis</i> . 5.             | 14. — ———, var.                     |
| 5. — ———, var.                       | 15. — ———, var.                     |
| 6. — <i>vitrea</i> . 4.              | 16. — ———, var.                     |
| 7. — ———, var.                       | 17. — <i>exigua</i> . 6.            |
| 8. — <i>Nunezii</i> . 1.             | 18. — <i>pellucida</i> . 2.         |
| 9. — ———, var.                       | 19. — ———, var.                     |
| 10. — ———, var.                      | 20. — ———, var.                     |



## MONOGRAPH OF THE GENUS APORRHAI.

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*Char. Gen.* Molluscum marinum; testâ turritâ, fusiformi; aperturâ sub-quadratâ; labio externo ætate dilatato, magno, antice et postice propè canales undatim emarginato; canali anticò rostrato, sub-foliato; labio interno crasso, canali postico.

### DESCRIPTIONS.

Sp. 1. A. PES-PELECANI. (pl. v. f. 3, 4.) Linn.

T. turritâ fusiformi, anfractibus angulatis, nodulosis; aperturâ sub-quadratâ; canalibus duobus, rostratis, sub-complanatis; labio externo crasso, bilobato.

A well known species found in Great Britain and the Mediterranean.

2. A. PES-CARBONIS. (pl. v. f. 1)——?

T. quam A. Pes-Pelecani magis tenui; canalibus elongatis; labio externo trilobato.

A thinner and smaller species, with the beaks of the canals narrower and more lengthened, and the outer lip divided into three digitations. Mediterranean.

3. A. OCCIDENTALIS. (pl. v. f. 2.)

T. turritâ, concentricè plicatâ, spiraliter striatâ; canalibus brevibus; labio externo unilobato.

Small turritid, with longitudinal ribs, spirally striated; canals short; outer lip with one digitation.

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## MONOGRAPH OF THE GENUS ROSTELLARIA.

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*Char. Gen.* Molluscum marinum; testâ fusiformi, antice in canalem rostratum desinente; aperturâ ovali; canali postico partem spiræ decurrente; labio interno crasso; labio externo digitato ad canalem emarginato; operculo corneo, unguiculato.



In this genus the notch or sinus is close to the canal, thus differing from *Strombus*, in which a portion of the outer lip intervenes.

### DESCRIPTIONS.

Sp. 1. *R. CURVIROSTRUM*. (pl. v. f. 9.) Enc. Met. *Strombus* *Fusus*. Gmel.

*T.* crassâ, lævi, fusiformi; apice plicato; anfractibus numerosis, convexiusculis; canali postico, super anfractûs penultimæ partem, decumbenti; canali antico brevi undato.

This is the well known species with a short curved beak; the general colour is reddish brown, with the aperture white.

Moluccas and Red Sea.

2. *R. CURTA*. (pl. v. f. 7, 11.) nobis. Zool. Proc. 1842.

*T. R.* *Curvirostro* similimâ, sed anfractu ultimo breviori; canali recto.

The last whorl of this species is shorter than of *R. Curvirostrum*, and the canal is straight. There is a broad band of brown colour close to the suture of the whorls. The specimen is in Mr. Cuming's collection.

3. *R. RECTIROSTRUM*. (pl. v. f. 8, 10.) Lam.

*T.* fusiformi, elongatâ, medio lævigatâ; anfractibus convexis primis cancellatis, ultimo infrâ spiraliter sulcato, rostro elongato, recto, gracili; labio externo prope canalem posticum lobato, emarginato; digitibus quinque ad sex.

Much more graceful and slender in form than the two preceding; the whorls nearest the apex are cancellated; all of them are ventricose; the suture of the spire is deeper, and the digitation of the outer lip commences nearer the posterior canal. The variety, fig. 10, with wider aperture, and somewhat less slender form, may possibly be distinct. The specimen is in the collection of Mr. Cuming.

China? Sumatra.

4. *R. PUVISII*. (pl. v. f. 5, 6.) Petit. M. S.?

*T.* turritâ; anfractibus supernè angulatis, spiraliter sulcatis; aperturâ angustatâ; labio interno crasso, labio externo crasso, granulato, prope canalem posticum lobato; digitis quatuor; canali postico recurvo; canali antico rostrato, brevi.

This species, which is spirally grooved, takes the general form of *Strombus Fissurella*, but, like the other *Rostellariæ*, has the outer lip emarginated close to the canal.

China.

## MONOGRAPH OF THE GENUS

### STRUTHIOLARIA.

*Char. Gen.* Molluscum marinum; testâ turritâ, ovali, ventricosâ; anfractibus plus minusve angulatis; apice obtuso; labio interno calloso, oblique elongato; labio externo crasso, sub-reflexo, sinuoso; supra infraque emarginato, in medio prominente; canali antico brevi, indistincto, minime profundo.

Turrited, ventricose, oval: whorls more or less angulated; apex obtuse; inner lip callous, obliquely elongated, so as to form a sort of obtuse beak at its union with the outer lip, behind this the canal is short and shallow, the outer lip is thickened and sinuous, receding at each extremity, and produced into a prominent lobe at the centre. We regard the sinus near the canal as connecting this genus with the Strombidæ.

#### DESCRIPTIONS.

Sp. 1. *S. STRAMINEA*. (pl. v. f. 16, 18, 20.) *Murex stramineus*, Gmel. *Str. nodulosa*, Lam.

*T.* crassâ, spiraliter striatâ, flammulis undatis, fulvis, pictâ; anfractibus angulatis, ad angulum nodulosus; aperturâ sub-quadratâ, margine crasso.

This well known species has the whorls angulated, and, when full grown, has the prominent lobe in the outer lip thick; the nodules on the angle of the whorls are triangular and large.

New Zealand.

2. *S. INERMIS*. (pl. v. f. 12, 13, 19.) Sow. *Zool. Journ.*——?

*T.* brevi, spiraliter striatâ; anfractibus rotundato-angulatis, ad angulum minutè nodulosus; aperturâ sub-quadratâ, margine angustatâ.

Short, spirally striated; with the angle of the whorls rounded and beaded; aperture nearly square, with the inner and outer lips narrow.

3. *S. GIGAS*. (pl. v. f. 17.) nobis.

*T.* *S. stramineæ* simillimâ, sed majori; angulo anfractuum rotundato, nodulis minoribus ornato.

A large shell, resembling *S. straminea* in general character, but having the angle of the whorls rounded, and the nodules

smaller, as in *S. inermis*. The specimen is in the collection of the Rev. F. J. Stainforth.

4. *S. oblita* (pl. v. f. 14, 15.) Sowerby Tankerville Catalogue App. p. xviii.

*T. ovali, lævi*; anfractibus angulatis; suturâ varice tumidâ lævi, impletâ, labio externo vix reflexo, paululùm incrassato; labio interno crasso.

Oval, smooth; whorls angulated; the suture covered by an enamelled tumidity, outer lip scarcely reflected, slightly thickened; inner lip thick. New Zealand.

We have had no opportunity of indentifying *S. microscopica* described by Mr. Gray in the Zoological appendix to Beechey's voyage.

#### EXPLANATION OF PLATE V.

*The figures half the natural diameter.*

##### APORRHAI.

1. *A. Pes-Carbonis*. Sp. 2.
2. — *occidentalis*. 3.
3. — *Pes-Pelecani*. 1.
4. — ———, young.

##### ROSTELLARIA.

5. *R. Povichii*. 4.
6. — ———
7. — *curta*. 2.
8. — *Rectirostrum*. 3.
9. — *Curvirostrum*. 1.

10. *R. Rectirostrum*. 3.
11. — *curta*, young. 2.

##### STRUTHIOLARIA.

12. *S. inermis*. 2.
13. — ———, var.
14. — *oblita*
15. — ———, var.
16. — *straminea*. 1.
17. — *gigas*. 3.
18. — *straminea*. 1.
19. — *inermis*, var. 2.
20. — *straminea*, young. 1.



## MONOGRAPH OF THE GENUS

### STROMBUS.

Char. Gen. Molluscum marinum; testâ conicâ, spirali, ventricosâ, crassâ; spirâ conicâ, plerumque plicatâ, acutâ; aperturâ plerumque angustatâ, posticè canaliculatâ, anticè in canalem brevem emarginatum desinente; labio interno plerumque incrassato; labio externo ætate dilatato, posticè plus minusve emarginato, unilobato, medio intus incrassato, anticè sinu è canali distincto, interrupto; operculo corneo, pyriformi, nucleo terminali.

In conformity with the plan announced in the first page of this number, the author contents himself with stating the characters of this genus as generally understood, without presuming at present to attempt such a definition as would prevent the possibility of shells being confounded with it which do not belong to it; it will, however, be perceived, on glancing over the plates, that there is an indescribable peculiarity in form and appearance by which most persons in the habit of seeing shells would know a Strombus at first sight. The shells belonging to this genus are spiral, conical and thick, with the spire conical, and generally plicated near the apex, the aperture is narrow, with a canal close to the body whorl, near to or upon the spire, and a short anterior canal, sometimes produced into a truncated beak; inner lip generally thickened with age; outer lip, when full grown, dilated, at the spiral extremity more or less elevated, emarginated, and having a single lobe, in the centre thickened within, generally inflected, and having a sinus near to the anterior termination, but distinct from the canal; operculum horny, pyriform, terminated by the nucleus anteriorly in a point. The difference between Strombus and Rostellaria is stated to be that in the latter there is no sinus in the outer lip distinct from the canal. In Pteroceras, the anterior canal is lengthened into a caudal appendage, and the outer lip is digitated. Strombi are found in seas of warm climates. In the following arrangement of species we commence with two belonging to a form which may probably hereafter be erected into a genus, the character of the anterior and posterior canals presenting a strong resemblance to those of Rostellaria, but having in the species now described a distinct though shallow sinus in the outer lip. There are, however, fossil species of the same general form without the sinus.

## DESCRIPTIONS.

Sp. 1. *S. FISSURELLA*. (pl. viii. f. 64, 65.) Lin. Syst. Nat. 1212.  
*Rostellaria Fissurella*, Lam. ?

*T. turritâ*, fusiformi, concentricè plicatâ, spiralitèr striatâ ; aperturâ ovali, posticè in carinâm canaliculatam ad apicem decurrente, anticè canali rostrato ; labio externo crasso, crenulato ; labio interno crasso.

Turritated, fusiform, concentrically plicated, spirally striated ; aperture oval, with a posterior carinated canal running up the spire ; outer lip thick, crenulated ; inner lip thick. The colour varies from pale yellow to banded brown.

India and the Philippines.

2. *S. CRISPATUS*. (pl. viii. f. 62, 63.)

*T. turritâ*, fusiformi, concentricè plicatâ, spiralitèr striatâ ; aperturâ ovali, posticè in canalem carinatham crispatham desinente, anticè canali breviter rostrato ; labio externo crasso, crenulato ; labio interno crasso ; operculo lateralitèr serrato.

Rather more ventricose than *S. Fissurella*, with the beak shorter, and the posterior canal resting upon the penultimate whorl only, and coiled at the extremity ; the outer edge of the operculum is serrated. Body pale straw colour, with three brown bands across the last whorl, Brought by Mr. Cuming from Luzon, Bureas and Panay, Philippines.

3. *S. CAMPBELLI*. (pl. vi. f. 22, 23.) Griffiths Cuvier. Mollusca, pl. 25.

*T. sub-fusiformi*, ventricosâ, lævi ; spirâ turritâ, elongatâ ; anfractibus convexiusculis, propè suturam unisulcatis, dorso anfractûs ultimi, obtusè unilobato, anticè sulcato ; labio externo elevato, expanso, postice inflexo ; sinu parvo.

Rather fusiform, ventricose, smooth ; spire turritated, elongated, whorls rather convex, with a groove near the suture, the last whorl with a very obtuse tubercle on the back, and several grooves near the anterior termination ; outer lip elevated, expanded, with an inflected prominence towards the upper part ; sinus small. The colour is pale brown, with interrupted bands of brown.

4. *S. VITTATUS*. (pl. vi. f. 27, 28, 29, 30, 31.) Linn, Syst. Nat. p. 1211. Including *S. turritus* and *S. sulcatus*, Lam. and Chemn.

*T. fusiformi-turritâ*, fulvo-rufescente, albo-fasciatim-maculatâ ; spirâ elongatâ, plicatâ ; anfractibus angulatis, prope suturam sulcatis, ultimo anticè sulcato ; labio interno crasso, angusto ; labio externo dilatato, internè sulcato, ad angulum sub-lobato.

Another fusiform species, of a pale brown colour, nearly covered by interrupted brown bands, the elongated spire is plicated, with a spiral groove near the suture, the body whorl generally smooth, sulcated anteriorly. *S. turritus*, (f. 27.) Lam. is distinguished

only by the spire being rather longer in proportion, and the greater part of the body whorl being plicated. *S. sulcatus*, (f. 31.) Chemn. is a dwarfish variety, with the groove near the suture deepened. There is another variety (f. 30.) in which only the first two or three whorls are plicated. East Indies.

5. *S. DEFORMIS* (pl. vi. f. 1, 8.) Griffith's Cuvier, Moll. pl. 25.

**T.** sub-fusiformi, spiraliter striatâ; spirâ mediocri; anfractibus angulatis; labio externo internè striato, ad anfractum ultimum elevato, prope spiram paululùm emarginato; sinu antico mediocri, labio interno striato.

A dull white shell, spirally striated all over, except in the middle of the body whorl in front; the spire plicated, the anterior canal of the aperture elevated, the outer lip slightly emarginated at the upper angle, both lips striated with raised lines, the sinus of the outer lip not very deep.

6. *S. COLUMBA* (pl. vi. f. 2, 3, 6, 7.) Lam. Tankervillei, Swainson?

**T.** sub-ovali, spiraliter striatâ, dorso prope marginem plicâ longitudinali; spiræ anfractibus angulatis, plicatis; labio interno calloso, striato; labio externo expanso, striato, supra infraque validè emarginato; aperturæ canali postico lobato, spiræ partem decurrente.

Nearly oval, spirally striated, with a longitudinal fold on the back near the margin of the aperture; whorls angular, plicated; inner lip striated, outer lip expanded, striated, with a deep emargination on the upper angle, and the anterior sinus deep; posterior canal with lobated margins running up part of the spire. The usual colour is pale brown, nearly covered on the back by mottled dark brown, which is interrupted by a nearly white band in the centre. India? and the Philippines.

7. *S. DILATATUS*. (pl. vii. f. 38, 39.) Sw. Zool. Ill. 1820, 1.

**T.** *S. Columbæ* simillimâ, sed magis ovali; plicâ laterali minus distinctâ; labio externo magis expanso; lobâ posticâ minori.

A more oval and finely striated pale brown species, with the outer lip more expanded, and less distinctly lobed and sinuated above than *S. Columba*.

8. *S. LABIOSUS*. (pl. vi. f. 15, 16.) Wood. Cat. Suppl.

**T.** ventricosâ, angulatâ; omnino sive in medio anfractûs ultimi striatâ; spirâ plicatâ; anfractibus angulatis, ultimo ad angulum noduloso; labio externo magno, expanso, margine incrassato, posticè unilobato, internè striato.

Ventricose, angulated; spirally striated in every part except the middle of the last whorl; spire plicated; the last whorl tuberculated; the outer lip large, expanded and thickened, striated within, with a lobe at the upper angle. The beautiful specimen from which figure 15 is taken is in the collection of W. Metcalfe Esq. it is of a rich, shining, yellowish brown colour.

9. *S. VARIABILIS*. (pl. vi. f. 9, 13, 14.) Sw. Zool. Ill.



T. ovali, sub-angulatâ, lævi; spirâ brevi; anfractibus plicatis; labio externo expanso, medio incrassato, ad canalem posticum et ad angulum supernum lobato, sinu valido.

Smooth, oval angulated, white, with interrupted brown bands; angle of the whorls plicated; outer lip with a lobe close to the posterior canal, and another at the upper angle, with a sinus between; anterior sinus not very deep.

10. *S. EPIDROMIS* (pl. vi. f. 12.) Linn. Syst. Nat. p. 1211\*

T. ovali, lævi; anfractibus sub-angulatis, ad angulum plicatis; labio externo magno, validè expanso, incrassato, postice paululùm sinuato.

Oval, smooth, brown, aperture white; spire plicated at the angle of the whorls; outer lip much expanded, slightly thickened above the anterior sinus, and very slightly emarginated near the spire.

11. *S. MINIMUS*. (pl. vi. f. 4, 5.) Sw.

T. *S. epidromi* simillimâ, sed minori; labio externo posticè bilobato, inter lobos valide sinuato.

Very much like *S. epidromis*, but smaller, with a deep sinus between the two lobes on the posterior angle of the outer lip. Colour dark reddish brown or fawn, with a white band on the angle, and another in the centre of the whorls.

East Indies.

12. *S. SIBBALDI*. (pl. vi. f. 10, 11.) nobis.

T. sub-clavatâ, lævi; spirâ parvâ: anfractibus angulatis, plicatis; ultimo magno, ventricoso; labio interno nigro-lineato; labio externo internè striato, medio sub-incurvo; sinu parvo.

This species has a small spire and ventricose body whorl; the inner lip is striated in the centre with short black lines; outer lip expanded, striated, with a very slight sinus. Colour white, banded and mottled with fawn. Brought by Dr. Sibbald from Ceylon.

13. *S. SUCCINCTUS*. (pl. vi. f. 20, 21.) Linn. Syst. Nat. p. 1212.

T. ovato-oblongâ, spiraliter tenue striatâ; spirâ brevi; anfractibus sub-angulatis; aperturâ elongatâ; canali postico spiram decurrente; labio externo intùs striato, ad angulum inflexo; sinu antico parvo.

Oval-oblong, very finely striated; spire short; whorls rather angulated; aperture elongated; anterior canal running up the spire; outer lip striated within; with an inflection at the angle; sinus small. The ground colour is a dull white, but the body of the shell is nearly covered by broad brown bands jagged at the edges. The pink variety is in the collection of the Rev. F. J. Stainforth.

East Indies.

14. *S. MARGINATUS* (pl. vi. f. 17.) Gmel. p. 3573. No. 15

T. *S. succinctæ* simillimâ, sed magis conicâ, angulo anfractuum carinato.

Very probably only a variety of the last, it is more conical in form, with the dorsal angle of the last whorl sharply keeled.

East Indies.

15. *S. LINEATUS* (pl. vii. f. 32, 33.) Lam. An. sans vert. *S. polyfasciatus*, Chemn.

*T.* conicâ, lævi, albâ; lineis nigris interruptis cinctâ; spirâ brevi; anfractibus noduloso-angulatis, aperturâ angustâ aurantiâ; labio externo prope spiram emarginato; labio interno tenui.

A smooth conical shell, white, with interrupted blackish lines or bands across the body whorl. The spire is short; the whorls angular, plicated at the angle. The aperture is of a golden tint.

Red Sea.

16. *S. CYLINDRICUS*. (pl. vii. f. 50, 57, 59.) Swainson. Zool. Illus. *S. Mauritianus* Lam. Anim. s. vert. vii. p. 206.

*T.* conicâ, lævi, spirâ brevi, anfractibus sub-angulatis, plerumque plicatis, ultimo ad angulum gibboso, aperturâ angustâ, labio externo posticè paululùm emarginato et unilobato.

A conical species, with short spire and narrow aperture; the outer lip is not much expanded; it is slightly emarginated above the outer angle. The usual colour is pale brown, with brown mottled bands. Fig. 50 represents a white variety, belonging to the Rev. F. J. Stainforth. The inside of the aperture has a beautiful tinge of pink.

Isle of France.

17. *S. LUHUANUS*. (pl. vii. f. 54.) Linn. Syst. Nat. p. 1203.

*T.* conicâ, *S. cylindrico* simillimâ, sed columella nigro marginatâ.

We can scarcely regard this as distinct from the preceding, although the columellar lip is edged with black, and in some specimens the outer lip is more decidedly lobed above. Moluccas.

18. *S. CONIFORMIS*. (pl. vii. f. 55, 61.)

*T.* conicâ, lævi, pallidè fulvâ, fasciis brunneis interruptis cinctâ, validè angulatâ; spirâ brevissimâ; anfractibus ad angulum plicatis; aperturâ angustâ; labio externo vix expanso, sinu parvo.

Both specimens are rather young, from the cabinets of Messrs. Norris and Stainforth, but we think that from the general form, and the absence of the posterior sinus, the species will prove to be distinct.

19. *S. DUBIUS*. (pl. vii. f. 80.)

We insert in this place a singular shell, from the collection of Mr. Cuming, which has the general form of a cone, yet the outer lip is slightly expanded upwards and crenulated near the margin within.

20. *S. MUTABILIS*. (pl. vii. f. 40, 45, 46, 47, 49, 52.) Swainson. Floridus, Lam.

*T.* ovatâ, angulatâ, anticè truncatâ, ad extremitates spiraliter striatâ; spirâ brevî, nodulosâ; aperturâ angustâ; labiis striatis, externo posticè angulato, sinu antico valido.

Oval, angular, striated at the spire and at the anterior part of the body whorl; spire short, tuberculated; aperture narrow, with both lips striated; outer lip angular above, truncated at the anterior termination, with the anterior sinus deep. The variations in colour are almost innumerable.

Moluccas and Philippines.

21. *S. URCEUS*. (pl. vii. f. 34, 35, 36, 37, 41, 42.) Gmel. p. 3518. No. 29. var. *S. incisus*. Wood. Ind. Test. Supp.

T. *S. Mutabili* simillimâ, sed magis elongatâ, anticè magis attenuatâ; spirâ longiorâ.

This species has not the square, truncated, flattened appearance of *S. mutabilis*. All the varieties, although differing greatly from each other, are easily distinguished from that species by the more tapering form of the extremities. The typical variety has the aperture of a dark, black colour. Some are of a delicate pink; others are beautifully mottled on the back, and a variety (f. 36) brought by Mr. Cuming from the Philippines, is of a much more oval shape. Between the variety (f. 41) named *S. incisus*, by Wood, and the typical variety, (f. 34) there appears to be a great difference, but having a great number of specimens, we traced the passage so gradually that it would be impossible to draw a line of separation. E. Indies and Philippines.

22. *S. MACULATUS*. (pl. vii. f. 53.) Nuttall.

T. ovali, lævi, anticè truncatâ; spirâ brevi, anfractibus rotundato-nodulosis; aperturâ angustatâ, lævi.

A species having the general form of *S. mutabilis*. It is of a dingy white colour, with obscure purple spots. Sandwich Islands.

23. *S. RUGOSUS*. (pl. vii. f. 58, 60.) Sow. Tank. Cat. App.

"T. oblongâ, longitudinaliter plicatâ, transversè striatâ, apicè acuminato, anfractibus supernè nodulosis; ultimo anfractu alterâ tuberculorum minimorum serie instructo; aperturâ oblongâ, labio externo intus striato, columellari valido, supernè infraque transversim striato; suturâ crenulatâ."

In shape like *S. plicatus*, but distinguished by its rugosity and by a second row of tubercles on the last whorl. The colour is white, mottled with brown. East Indies.

24. *S. PLICATUS*. (pl. vii. f. 56.) Lam. Anim. s. vert. vii. p. 210.

T. ovali, angulatâ, undatim longitudinaliter plicatâ spiraliter striatâ, aperturâ striatâ.

Resembling *S. mutabilis* &c. in form, but longitudinally plicated, with the whorls angular, the ribs raised in tubercles at the angles. Colour grey, banded with brown; or brown, with white spotted bands. E. Indies and Moluccas.

25. *S. ELEGANS*. (pl. vii. f. 43, 48.) *Nobis*.

T. sub-elongatâ, fusiformi; spirâ sub-elongatâ, anfractibus angulatis, ad angulum plicatis, in medio minutè tuberculatis, anticè sulcatis; ultimi margine varicoso; aperturâ ovali, striatâ.

Much shorter in the body whorl than any of the three preceding species. It is of a pale brown, clouded in bands with darker brown; the aperture is striated and of a dark brown colour. It approaches *S. rugosus* in some characters, but is much more fusiform; the spire much larger in proportion to the aperture. One variety is nearly smooth.

26. *S. HÆMASTOMA*. (pl. vii. f. 51.) *Nobis*.

*T. ovali*, striatâ, longitudinaliter plicatâ; aperturâ roseâ, striatâ; labio externo sinu valido.

A small white striated species, with longitudinal ribs and a purplish pink striated aperture. Specimens are contained in the collections of Mr. Norris, Mr. Stainforth and Miss Saul.

27. *S. GIBBERULUS*. (pl. vi. f. 18, 19, 24, 25, 26.) Gmel. 3514.

*T. ovali*, medio lævigatâ, anticè striatâ; anfractibus inæqualiter gibbosis, ultimo ad dorsum complanato; spirâ brevi; labio externo posticè validè lobato, sinuato; sinu antico valido.

The whorls are unequally gibbous at the upper angle.

The varieties are, pale brown, mottled with zigzag lines of brown; white, with spotted brown bands; the same with a purple streak on the columellar lip and on the inner surface of the outer lip; and nearly white, with pink aperture.

East Indies and Moluccas.

28. *S. FUSIFORMIS* (pl. ix. f. 91, 92.) *Nobis*.

*T. fusiformi*, lævi, anticè subtruncatâ; spirâ conicâ, anfractibus prope suturam uni-sulcatis; ultimo ad marginem striato, dorso subgibboso; aperturâ angustatâ; labiis intus striatis posticè in canalem spiræ partem decurrentem attenuatis; externo obliquè truncato; sinu antico parvo.

The colour of this species is of a pinkish or purplish white, mottled and banded with brown, the lips of the aperture are buff. The aperture is peculiar in form, the lips being attenuated into a canal which is bent forwards on the penultimate whorl of the spire, and the outer lip obliquely truncated at the base. This character connects *S. fusiformis* with the following species. Messrs. Norris, Stainforth and Cuming possess specimens.

29. *S. DENTATUS*. (pl. ix. f. 86, 87.) Gmel. p. 3519. and *dentatus* Wood. *S. tridentatus* Lam.

*T. oblongâ*, lævi, anticè striatâ, truncatâ; spirâ breviusculâ; anfractibus plicatis, convexiusculis; aperturâ posticè in canalem brevem angustatâ, anticè effusâ; labio interno angusto paululùm incrassato, posticè striato; externo brevi, striato, anticè quinque-fariam dentato, effuso, obliquè truncato.

The shortness of the outer lip, its anterior tooth-like lobes and its truncated character distinguish this species so that it might almost stand alone as a genus. The colour is yellowish white inclining to pink or purple at the apex, ornamented by waved spots of brown. The striæ on the inside of the outer lip are interlined with dark brown.

30. *S. TERESELLATUS*. (pl. ix. f. 84, 85.)

*T. elongatâ*, lævi, spirâ brevi; anfractu ultimo anticè obliquè truncato; aperturâ internè striatâ; labio externo vix expanso, paululùm incrassato; sinu antico indistincto, sub-dentato.

A narrow, elongated smooth species, shaped like a *Terebellum* with the last whorl truncated. The colour varies from pale yellow,



to pale brown, mottled with darker brown. The striæ on the inner part of the aperture are in some specimens nearly obsolete.

31. *S. BULBULUS* (pl. ix. f. 81, 82, 83.) *Nobis*, Zool. Proc. 1842.

*T. S. terebellato* simillimâ sed magis ventricosâ, anfractu penultimo gibboso; labio interno validiore; labio externo validè striato, posticè spiræ partem decurrente.

More ventricose than *S. Terebellatus*, with the penultimate whorl gibbous, the inner lip thicker, the outer lip striated to its edge and posteriorly elevated on the last whorl of the spire. Fig. 84. is from a specimen in Mr. Stainforth's collection where it has existed for some time without any history, and we think it may be a variety of this species which has been brought by Mr. Cuming from the Philippine Islands.

32. *S. GLABRATUS*. (pl. viii. f. 66, 67.) *Nobis*.

*T. sub-pyramidalis*, nitidâ; aperturâ ovali, bicanaliculatâ; columellâ truncatâ; labio externo crasso reflexo, anticè sub-emarginato; operculo ovali; anfractu ultimo ad dorsum prope suturam plicato.

This singular shell, having the general form of a *Nassa*, nevertheless has a slight emargination in the outer lip, and is considered by experienced conchologists as being allied to the family, at least, of *Strombidæ*, although differing from the present genus in being covered by a glassy enamel. We place it here to remain till some author shall undertake to erect it into a new genus, and define its characters. The colour is pale straw, with a reddish tinge on the back, and a grey line under the suture of the spire.

33. *S. PUGILIS*. (pl. viii. f. 74.) *Lin. Syst. Nat.* 1209.

*T. turbinatâ*, ventricosâ; spirâ brevî, spiraliter sulcatâ; anfractibus angulatis ad angulum tuberculis magnis acutis coronatis; aperturâ angustâ, labio interno tenui expanso, externo brevi, internè striato, posticè emarginato, lobato, anticè truncato; sinu magno; operculo parvo, pyriformi.

This well-known shell is of a rich vermilion colour, tinted with yellow and at the anterior termination with purple. It is lobed at the angle of the outer lip and truncated at the anterior extremity.

W. Indies.

34. *S. PYRULATUS*, (pl. viii. f. 72, 75.) *Lam.*

*T. S. pugili* simili sed magis elongatâ, spiræ anfractibus vix tuberculatis validè striatis.

More elongated than *S. pugilis*, with the whorls of the spire scarcely tuberculated. The colour is dark brown, tinged with purple at the mouth. The variety, f. 72, is white with zigzag lines of brown. We think, however, that both varieties may belong to *S. pugilis*, the difference not being greater than between acknowledged varieties of other species.

35. *S. GRACILIOR* (pl. viii. f. 73.) *Sow. App. Tank. Cat.*

“*T. ovato-oblongâ*, apice acuminato-pyramidalis, ad basin transversè striatâ, pallidè aurantiacâ; anfractibus supernè nodulosis; labio interno tenui expanso, externè dilatato intus transversè leviter sulcato.”

We think this more distinct from *S. pugilis*, than *S. pyrulatus*. It is more slender, the spire more pyramidal, a larger space being left between the angle and suture of the whorls. The colour is yellowish brown; the aperture white, the outer lip edged with orange. South Seas.

36. *S. CANARIUM*. (pl. viii. f. 69, 70.)

*T. ventricosâ, crassâ, lævi, anticè sulcatâ; spirâ brevi; anfractibus rotundato-angulatis; labio interno gibboso; labio externo expanso, crasso, angulato, anticè angustato.*

The colour of this species is a light brown, sometimes tinged with purple, and covered by zigzag lines of light or dark brown; the aperture is white, or nearly so. A very dark variety is named *S. Vanikorensis*, in *Voy. Astr.* Ceylon, Moluccas.

37. *S. ISABELLA*. (pl. viii. f. 68, 71.) Lam.

*T. S. canario simillimâ, sed graciliori; anfractibus obtusè angulatis.*

More slender than *S. canarium*, the whorls in a slight degree more angular, the colour generally paler. We are doubtful, however as to its distinctness. A banded variety is named *S. tæniatus*, in *Voy. Astr.*

38. *S. FASCIATUS*. (pl. x. f. 104, 106.) Gmelin. p. 3510. *Bubonius*, Lam. p. 203

*T. ovali, sub-quadratâ, lævi; spirâ brevi; anfractibus angulatis, ad angulum tuberculatis, ultimo tuberculorum seriebus tribus; aperturâ sub-quadratâ; labio externo posticè elevato, medio incrassato; sinu antico magno.*

Oval, ventricose, angulated, smooth; spire rather short, tuberculated at the angle of the whorls, with three rows of tubercles on the last whorl, those on the posterior angle largest. General colour light brown, with zigzag patches of white on the rows of tubercles. Antilles.

39. *S. GRANULATUS*. (pl. ix. f. 100.) Sowerby Zool. Journ.

*T. ovali, sub-quadratâ, spiraliter striatâ; spirâ longiusculâ; anfractibus angulatis, tuberculis coronatis, ultimo seriebus tribus tuberculorum minorum, margine flexuoso; labio interno tenui, expanso; labio externo crasso, sub-inflexo, posticè elevato, internè granulato; sinu anticè magno.*

A species resembling *S. fasciatus* in shape, with brown and blackish spots arranged in bands on a light ground; the aperture is white within, yellow inclining to orange on the margins; the inner surface of the outer lip is granulated.

40. *S. THERSITES*. (pl. x. f. 109.) Gray.

*T. ovali, spiraliter striatâ; spirâ elongatâ; anfractibus angulatis, acutè tuberculatis, ultimo gibboso, ventricoso, margine crasso, expanso; aperturâ sub-quadrata; labio interno crasso, expanso; posticè elevato, calloso; labio externo crasso, posticè elevato, quadrato, medio crasso.*

The ground colour of this shell is white, with spots of deep brown arranged in bands, the spire is rather long and slender, the lips of the aperture are thick, and formed into an elevated square at the upper part, they are of a buff colour, with band-like spots on the outer margin. In the collection of Mr. Cuming and Miss Saul.

Rurutu.

41. *S. TRICORNIS*. (pl. x. f. 103, 107.) Humph. Portland Catalogue, p. 5.

*T. ventricosâ, sub-trigonâ, lævi, spiraliter obscure rostratâ; spirâ brevi, nodulosâ; anfractibus angulatis, ultimi margine flexuoso, crasso, ad angulum tuberculis tribus magnis, mediano maximo, elongato; aperturâ sub-trigonâ; labio externo dilatato, crasso, posticè elevato in spinam ad angulum posticum elongato.*

A triangular shell, with three tubercles on the back of the body whorl, the largest in the centre, the outer lip is elevated and elongated at the outer angle, the ground colour is white or pale brown, in some varieties very elegantly mottled with dark brown streaks and patches; the aperture is buff.

Antilles.

42. *S. PERUVIANUS*. (pl. x. f. 110.) Sw. Zool. Illustr.

*T. trigonâ; spiraliter costatâ; spirâ obtusâ; anfractibus nodulosus, ultimo magno, tuberculis magnis coronato, ad dorsum uno maximo, in medio serie tuberculorum minorum; aperturâ sub-trigonâ; labio interno posticè crenato; labio externo in angulum acutum elevato.*

The colour of this shell is pinkish brown; the aperture is buff, tinged with deep rose and orange.

43. *S. LOBATUS*. (pl. viii. f. 76, 77, 78.) Sw. Zool. Illustr. 1821. *S. bituberculatus*, Lam. vii. p. 202. (1822.)

*T. trigonâ, spiraliter costatâ; spirâ brevi, tuberculatâ; anfractu ultimo margine expanso flexuoso, ad angulum tuberculis coronato, dorso duobus maximis armato, in medio seriebus duabus tuberculorum minorum; aperturâ sub-trigonâ, posticè plicatâ; labio externo expanso posticè bilobato, internè crenulato.*

The usual ground colour is grey, mottled with greenish brown. The variety, figure 78, is destitute of the two large tubercles which generally characterize the species.

Antilles.

44. *S. GALLUS*. (pl. x. f. 108, 111.)

*T. S. lobato simili, tuberculis maximis tribus; labio externo magis dilatato, posticè in digitam attenuato; canali anticè elongato.*

Resembling *S. lobatus*, but having three large tubercles, the two minor rows of tubercles wanting, the outer lip much more expanded, with a posterior elongated lobe, and an anterior caudal canal.

Asia and America?

45. *S. ACCIPITRINUS*. (pl. x. f. 115, 116.)

*T. sub-trigonâ, spiraliter costatâ; spirâ brevi; anfractibus angulatis, ad angulum tuberculatis, ultimo marginè expanso, tuberculis magnis duobus, mediano maximo; aperturâ latâ; labio*

interno expanso; externo posticè angulato, medio crasso, sub-reflexo.

A large white, short, thick species, with a very large tubercle on the dorsal part of the angle of the last whorl, and one rather smaller between it and the margin.

46. *S. INERMIS*. (pl. x, f. 113.) Sw. Bligh Catalogue.

*T. S. accipitrino* simili, sed longiore; spirâ magis attenuatâ; tuberculis principalibus minoribus; anfractu ultimo medio crenulato.

Like *S. accipitrinus*, but longer, with the spire more attenuated; the principal tubercles smaller; the last whorl is crenulated in the middle.

47. *S. GIGAS*. (pl. x. f. 117.) Linn. Syst. Nat. p. 1210.

*T. sub-quadratâ, angulatâ, rugosâ, spiraliter costatâ; spirâ mediocri; anfractibus angulatis, tuberculis magnis, elongatis, armatis; aperturâ latâ; labio externo dilatato, tenui, posticè in alam sub-quadratam elevato.*

This well-known shell, the largest but one of the genus, is of a buff colour, with a greenish brown epidermis, the aperture beautifully tinted with rose colour. Antilles.

48. *S. GOLIATH*. (pl. x. f. 118.) Chemn. xi. p. 147.

*T. ovali, rugosâ, spiraliter, distanter, sulcatâ sulcis duplicatis; anfractibus ad angulum obtusè nodulosis; labio externo latè expanso, complanato, posticè in alam rotundatam elevato; sinu antico parvo.*

Oval, rugose, with distant, double, spiral grooves; the whorls obtusely angulated with large blunt tubercles; the outer lip, especially at the upper part, is widely expanded and flattened; the anterior sinus is shallow. The colour is white, shaded with light pink, and yellow in the aperture.

49. *S. AURIS-DIANÆ*. (pl. ix. f. 101, 102.) Linn. Syst. Nat. p. 1209.

*T. ovali, lævi; spirâ glabrâtâ; anfractibus angulatis; ad angulum plicato-tuberculatis, ultimo lato; aperturâ angustâ, canali elongato, recurvo; labio interno tenui expanso, margine spiram tegente; labio externo crasso, sub-inflexo, posticè in digitum elongato; sinu antico magno.*

The back of this shell is white, marbled with purplish brown; the inner lip is continued in a glassy enamel covering the spire and the front of the shell, the inside of the aperture is richly tinted with deep vermilion.

50. *S. LAMARCKII*. (pl. ix. f. 98, 99. varieties, 88, 93.) Gray.

*T. S. Auris-Dianæ* simili, sed rugosâ, crassiore; labio interno minus expanso; aperturâ internè crenulatâ.

This species nearly resembles *Auris-Dianæ*, but is rugose, having two rows of tubercles besides those on the angle, and the inside of the aperture is crenulated at both extremities. Some



varieties however, occur, which connect the two species rather closely. Fig. 88 is a very fine variety from the collection of Mr. Cuming, with an orange aperture. Fig. 93 is one belonging to Mr. Norris, which has not the crenulations in the aperture.

East Indies.

51. *S. MELANOSTOMA*. (pl. ix. f. 89, 90, 94.) Sw. *S. adustus*, Nonnull.

*T.* ovali, sub elongatâ, angulatâ, rugosâ; spirâ mediocri; anfractibus tuberculatis; aperturâ angustâ; labio interno expanso; labio externo crasso, sub-inflexo, posticè, in digitam elongato elevato.

A species resembling the two former in shape, having the external rugosity and internal crenulation of *S. Lamarckii*. The inner lip and the margin of the outer lip are of a deep black, except in the varieties, fig. 89 and 94, in which the anterior part of the inner lip and a wider portion of the outer lip are of an orange colour. The variety, f. 89, is remarkable for the shortness of the posterior digitated lobe.

East Indies.

52. *S. PACIFICUS*. (pl. ix. f. 95.) Sw. Exotic Conchology.

*T.* sub-trigonâ, lævi, spiraliter sulcatâ; spirâ elongatâ; anfractibus angulatis, plicato-tuberculatis; aperturâ internè sulcatâ, sulcis fulvo-inter-lineatis; labio interno calloso, expanso; labio externo expanso, ad anfractus tres elevato; posticè lato, uni-lobato.

The shell is pinkish white, ornamented by zigzag lines and patches of light brown, the outer lip is broadly expanded, and so elevated as to reach three whorls of the spire; the inside of the aperture is strongly ribbed, of an orange colour between the ribs.

Pacific Ocean.

53. *S. AUSTRALIS*. (pl. ix. f. 96, 97.) nobis.

*T.* ovali, rugosâ, spiraliter costatâ; spirâ elongatâ; anfractibus angulatis, plicato-tuberculatis, ultimo costis tuberculatis duabus; aperturâ latâ; labio interno anticè gibboso; labio interno ad anfractus duos elevato, validè expanso, uni-lobato, intùs sulcato, posticè costis duabus magnis, marginè crasso, sub-inflexo, intùs crenulato: canali recurvo.

A white shell, tinged with purple, banded at the margin with brown, with deep reddish brown on the margins of the inner and outer lips; the shape resembles that of *S. pacificus*, but it is more square, and thicker; the inner and outer lips are both gibbous in front, the outer lip is sulcated within, having two large distinct ribs near the suture.

Australia.

54. *S. GALEATUS*. (pl. x. f. 114.) Sw. Phil. Mag. (1823.) *S. crenatus*. Sowerby, Tank. Cat. (1825) *S. Galea*, Wood's Cat.

*T.* sub-conicâ, spiraliter costatâ; spirâ brevissimâ; aperturâ latâ; labio interno tenui, expanso; labio externo expanso, crasso, crenato, posticè lato.

This shell is remarkable for the large rounded ribs and for the conical form of the young specimen. When in good preservation,

it is covered by a rather thickish brown epidermis, the inner lip is orange, the outer lip white, banded with orange.

55. *S. PAPILIO*. (pl. vii. f. 44.) Chemn. *S. exustus*, Humph.

*T. ovali, rugosâ, spiraliter striatâ, seriatim tuberculatâ; spirâ brevi; anfractibus angulatis; ad angulum tuberculatis; aperturâ angustâ, nigrâ, striatâ; canali bi-emarginato; labio externo postice trilobato, medio incrassato, sub-inflexo, inter sinum anticum et canalem dentato; labio interno anticè emarginato.*

The ground colour of this shell is a whitish grey, with three irregular interrupted bands of light brown with dark coloured zigzag lines; the inner lining of the aperture is of a deep red, inclining to black.

56. *S. LENTIGINOSUS*. (pl. viii. f. 79.) Linn. Syst. Nat. p. 1208.

*T. ovali, rugosâ, crassâ, seriatim tuberculatâ; spirâ brevi; anfractibus angulatis; tuberculis magnis, coronatis; aperturâ angustâ; canali bi-emarginato; labio externo posticè trilobato, medio incrassato, inter sinum anticum et canalem dentato; labio interno gibboso, posticè elevato, anticè truncato.*

The colour of this shell is whitish grey with brown spots, the aperture of a delicate pinkish white, obscurely banded. *S. Papilio* resembles this species, but is thinner, with a black striated aperture.

East Indies.

57. *S. LATISSIMUS*. (pl. x. f. 112.) Linn. Syst. Nat. p. 1211.

*T. ovali, ventricosâ, truncatâ, spiraliter obsolete costatâ; spirâ mediocri; anfractibus sub-angulatis, tuberculatis; ultimo sub-complanato, lateraliter gibboso, margine validè expanso; aperturâ latâ; labio interno incrassato; labio externo latissimo expanso, posticè elevato, medio latè inflexo; sinu antico parvo.*

The general colour is pale brown, with interrupted bands of white, and longitudinal undulated streaks of dark reddish brown; the aperture is white, much expanded, and remarkable for the broad flattened inflection in the central part.

58. *S. LACINIATUS*. (pl. x. f. 105.) Chemn. *S. cristatus*, Lam. vii. p. 202.

*T. ovali, spiraliter striatâ; spirâ elongatâ; anfractibus angulatis, tuberculatis, ultimo propè aperturam gibboso, sub-complanato, ad dorsum tuberculis magnis tribus, mediano maximo, armato, margine expanso; aperturâ magnâ; labio externo expanso, posticè suprâ spiram decurrente, quadri-lobato, medio latè inflexo, anticè inter sinum et canalem dentato; sinu magno.*

The colour of this beautiful shell is light brown with interrupted light bands at the back, and white with zigzag brown lines in front; the inner part of the aperture is deep purplish brown. The inflected and lobed margin of the outer lip, which is expanded and carried upwards to the apex of the spire; the general form of the body whorl; and the prominent dentated lobe between the anterior sinus and the canal point out the close relation which this species bears to the genus *Pteroceras*.

The author is unable to identify *S. persicus* and *S. Integer*, Sw.

## EXPLANATION OF PLATES.

## STROMBIS.

- |                                     |                                                |
|-------------------------------------|------------------------------------------------|
| 1. <i>S. deformis</i> , var. Sp. 5. | 46. <i>S. mutabilis</i> , var.                 |
| 2. — <i>Columba</i> , var. 6.       | 47. — ———, var.                                |
| 3. — ———, var.                      | 48. — <i>elegans</i> , var. 25.                |
| 4. — <i>minimus</i> , 11.           | 49. — <i>mutabilis</i> , var. 20.              |
| 5. — ———, var.                      | 50. — <i>cylindricus</i> , var. 16.            |
| 6. — <i>Columba</i> , var. 6.       | 51. — <i>Hæmastoma</i> , 51.                   |
| 7. — ———                            | 52. — <i>mutabilis</i> , var. 20.              |
| 8. — <i>deformis</i> , 5.           | 53. — <i>maculatus</i> , 22.                   |
| 9. — <i>variabilis</i> , 9.         | 54. — <i>Luhuanus</i> , 17.                    |
| 10. — <i>Sibbaldii</i> , 12.        | 55. — <i>coniformis</i> , 18.                  |
| 11. — ———                           | 56. — <i>plicatus</i> , 24.                    |
| 12. — <i>epidromis</i> , 10.        | 57. — <i>cylindricus</i> , var. 16.            |
| 13. — <i>variabilis</i> , var. 9.   | 58. — <i>rugosus</i> , 23.                     |
| 14. — ———, var.                     | 59. — <i>cylindricus</i> , 16.                 |
| 15. — <i>labiosus</i> , 8.          | 60. — <i>rugosus</i> , 23.                     |
| 16. — ———, var.                     | 61. — <i>coniformis</i> , 18.                  |
| 17. — <i>marginatus</i> , 14.       | 62. — <i>crispatus</i> , 2.                    |
| 18. — <i>gibberulus</i> , var. 26.  | 63. — ———                                      |
| 19. — ———                           | 64. — <i>Fissurella</i> , 1.                   |
| 20. — <i>succinctus</i> , var. 13.  | 65. — ———, var.                                |
| 21. — ———                           | 66. — <i>glabratus</i> , 32.                   |
| 22. — <i>Campbelli</i> , 3.         | 67. — ———                                      |
| 23. — ———                           | 68. — <i>Isabella</i> , 37.                    |
| 24. — <i>gibberulus</i> , var. 27.  | 69. — <i>canarium</i> , 36.                    |
| 25. — ———, var.                     | 70. — ———                                      |
| 26. — ———, var. 27.                 | 71. — <i>Isabella</i> , var. <i>tæniatus</i> . |
| 27. — <i>vittatus</i> , var. 4.     | 71.                                            |
| 28. — ———                           | 72. — <i>pyrulatus</i> , var. 34.              |
| 29. — ———                           | 73. — <i>gracilior</i> , 35.                   |
| 30. — ———, var. <i>sulcatus</i>     | 74. — <i>pugilis</i> , 33.                     |
| 31. — ———, var. <i>turritus</i> .   | 75. — <i>pyrulatus</i> , 34.                   |
| 32. — <i>lineatus</i> , 15.         | 76. — <i>lobatus</i> , 43.                     |
| 33. — ———                           | 77. — ———                                      |
| 34. — <i>urceus</i> , 21.           | 78. — ———, var.                                |
| 35. — ———, var.                     | 79. — <i>lentiginosus</i> , 56.                |
| 36. — ———, var.                     | 80. — <i>dubius</i> , 19.                      |
| 37. — ———, var.                     | 81. — <i>Bulbulus</i> , 31.                    |
| 38. — <i>dilatatus</i> , 7.         | 82. — ———, var.                                |
| 39. — ———                           | 83. — ———, var.                                |
| 40. — <i>mutabilis</i> , 20.        | 84. — <i>terebellatus</i> , var. 30.           |
| 41. — <i>urceus</i> , var. 21.      | 85. — ———                                      |
| 42. — ———, var.                     | 86. — <i>dentatus</i> , 29.                    |
| 43. — <i>elegans</i> , 25.          | 87. — ———, var.                                |
| 44. — <i>Papilio</i> , 55.          | 88. — <i>Lamarckii</i> , var. 50.              |
| 45. — <i>mutabilis</i> , var. 20.   | 89. — <i>melanostoma</i> , var. 51.            |

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|-------------------------------------|----------------------------------|
| 90. <i>S. Melanostoma</i>           | 105. <i>S. laciniatus</i> , 58.  |
| 91. — <i>fusiformis</i> . 23.       | 106. — <i>fasciatus</i> . 38.    |
| 92. — ————                          | 107. — <i>tricornis</i> . 41.    |
| 93. — <i>Lamarckii</i> , var. 50.   | 108. — <i>Gallus</i> . 44.       |
| 94. — <i>melanostoma</i> , var. 51. | 109. — <i>Thersites</i> . 40.    |
| 95. — <i>Pacificus</i> . 52.        | 110. — <i>Peruvianus</i> . 42.   |
| 96. — <i>Australis</i> . 53.        | 111. — <i>Gallus</i> , var. 44.  |
| 97. — ————                          | 112. — <i>latissimus</i> . 57.   |
| 98. — <i>Lamarckii</i> . 50.        | 113. — <i>inermis</i> . 46.      |
| 99. — ———— 50.                      | 114. — <i>galeatus</i> , 54.     |
| 100. — <i>granulatus</i> , 39.      | 115. — <i>accipitrinus</i> . 45. |
| 101. — <i>Auris-Dianæ</i> . 49.     | 116. — ————                      |
| 102. — ————                         | 117. — <i>gigas</i> . 47.        |
| 103. — <i>tricornis</i> . 41.       | 118. — <i>Goliath</i> . 48.      |
| 104. — <i>fasciatus</i> . 38.       |                                  |
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## MONOGRAPH OF THE GENUS PTEROCERAS.

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*Char. Gen.* Testâ ovali, angulatâ, spiraliter costatâ; spirâ conicâ, anfractibus angulatis aperturâ elongatâ, anticè que posticè, in digitam canaliferam desinente; internè longitudinaliter uniplicatâ; labio externo ætate dilatato, increasato, digitis arcuatis canaliferis diviso; operculo corneo, unguatim acuminato.

The shells of this genus are generally of an oval shape, angulated on the upper part of the whorls, and spirally ribbed. The aperture is elongated, terminating at each extremity in a lengthened caudiform canal. When full grown, the outer lip is expanded, thickened and divided into from four to eight hollow digitations. The anterior sinus is separated from the canal by a prominent lobe; the inner lip is thickened, and, when mature, unites with the upper part of the outer lip in partly concealing the spire.

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### DESCRIPTIONS.

1. *Pt. TRUNCATUM.* (pl. xi. f. 13.) *Lam.* Anim. sans Vert. vii. p. 195.

*T.* magnâ, ovali, spiraliter costatâ, albâ, lutescente, vel pallidè roseâ; spirâ nodulosâ, apicè truncatâ, complanatâ; aperturâ lævi; labio externo digitis quinque brevibus, sub-rectis.

This species, which is the largest of the genus, differs from *P. Lambis* in the apex of the spire, the top of which is truncated and flattened. The shell is about a foot in length, and in the oldest specimens we have seen, the digitations are much shorter than those of *P. Lambis*. Polynesia and Australia.

2. *Pt. LAMBIS.* (pl. xi. f. 5, 6, 7.) *Lin.* Syst. Nat. p. 1208.

*T.* subtrigonâ, spiraliter costatâ, angulatâ; anfractu ultimo tuberculorum seriebus tribus; tuberculo magno dorsali ad angulum; aperturâ lævi, canalibus sub-elongatis; labio externo expanso; digitis quinque sub-recurvis.

This species seldom reaches above half the length of *P. truncatus*, and the apex of the spire is acute. The colour varies in the aperture from white to dark clouded orange, and

on the back from pinkish white, mottled with brown, to greyish white, mottled with black. India. Ceylon.

3. *Pt. AURANTIA*. (pl. xi. f. 11.) *Lam. Anim. sans Vert.* vii. p. 198.

*T.* sub-quadratâ, spiraliter striatâ, seriebus tribus tuberculorum cinctâ, albâ, rufo-maculatâ; aperturâ elongatâ, aurantiacâ, lævi, canalibus duobus et digitis quinque tenuis, arcuatis, elongatis; labio interno angusto, anticè gibboso.

The digitations of this smooth orange-mouthed species are elongated, slender, and curved upwards. East Indies.

4. *Pt. CHIRAGRA*. (pl. xi. f. 12.) *Lin. Syst. Nat.* p. 1207.

*T.* ponderosâ, magnâ, spiraliter costatâ, ad angulum tuberculatâ, rufâ, pallidè fulvâ, fusco-maculatâ; aperturâ excavatâ, internè plicatâ, roseâ, nigrostriatâ; canalibus terminalibus (postico præcipuè) recurvis, digitis marginalibus quatuor arcuatis, unâ inter canalem et sinum; labio interno gibboso, nigrescente, internè striato.

In this well known species the posterior canal is strongly recurved and bent downwards over the spire as far as the angle. The digitations are large and strongly curved; one of them being placed on the lobe between the sinus and the canal; the aperture is deep. East Indies.

5. *Pt. RUGOSUM*. (pl. xi. f. 9. 10.) *nobis*.

*T.* crassâ, sub-ovali, spiraliter striatâ, costis quatuor nodulosis cinctâ, digitis crassis, arcuatis, terminalibus, recurvis, unâ inter sinum anticum et canalem; aperturâ; latâ, validè excavatâ, intùs uniplicatâ, sulcis nigris striatâ; labio interno sulcis nigris striato.

After careful examination, we have arrived at the conclusion that this shell, although generally regarded as a mere variety of *Pt. Chiragra*, is perfectly distinct. The principal difference consists in the comparative smoothness and flatness of the inner lip and the strong downward curve of the posterior canal, which reaches the angle of the body whorl in *Pt. Chiragra*. *Pt. rugosum* is thick, sub-oval, spirally striated, with four tuberculated ribs on the body whorl, below the angle. The digitations are thick and curved, the posterior terminal one, although somewhat recurved is not bent downwards over the spire, as in *Pt. Chiragra*. The aperture is wide, and very deep, with the interior strongly plicated, and transversely sulcated with black interstices; the inner lip is sulcated in the same manner. The general colour of the shell is light brown mottled with darker touches and blackish stripes on the terminations of the digitations. The aperture is more or less strongly tintured with rose colour; the black striped grooves covering a larger

portion of the interior in one variety than in the other.

South Seas.

6. Pt. SCORPIO. (pl. xi. f. 1.) *Linn.* Gmel. p. 3508. No. 4.

T. sub-quadratâ, spiraliter sulcatâ, tuberculorum seriebus tribus cinctâ, tuberculorum dorsalium tribus ad angulum maximis, tuberculis intermediis parvis, digitis septem, terminalibus, elongatis, tuberculatis; posticâ ad basin in alam complanatam dilatâtâ; aperturâ elongatâ, ad marginem carneolâ, intus purpureâ, costis albis nigro interlineatis, transversis; labio interno costis albis nigro interlineatis.

This species is distinguished from the rest by the knobs in the digitations, for which reason it is generally called the "*Gouty Scorpion*."

Moluccas, East Indies.

7. Pt. PSEUDOSCORPIO. (pl. xi. f. 2.) *Lam.*

T. crassâ, sub-quadratâ, spiraliter costatâ, tuberculorum seriebus tribus cinctâ, ad angulum tuberculis magnis, digitis septem, crassis, vix nodulosis; posticâ ad basin crassâ; aperturâ sulcis interlineatis, irregularibus, elongatis, ad labium internum distantibus, ornatâ.

Differing from Pt. scorpio in the thickness and comparative smoothness of the digitations, in the absence of the flattened lobe at the base of the posterior canal, and in the comparative coarseness of the sulci on the inner lip. The colour is of a whitish brown mottled with darker brown, which is darkest at the extremities; the aperture in one variety is light brown, and in the other of a dark reddish brown, with narrow white ribs interlined with black.

8. Pt. MILLIPEDA. (pl. xi. f. 3.) *Linn.*

T. ovali, sub-lævigatâ, spiraliter levitè striatâ, dorso ad angulum tuberculis magnis; infra-angulum seriebus duabus tuberculorum; digitis decem, parvis; tribus posticis unetâ anticâ, longiusculis; medianis brevissimis, arcuatis: aperturâ sub-lævigatâ, intus albo sulcatâ, fulvo-interlineatâ, margine dilatâtâ, tenui.

The general colour is whitish brown mottled with darker brown, with a narrow blackish line at the suture of the whorls; the aperture is of a smoky brown, which is darker between the white ridges.

Philippines, Indian Ocean.

9. P. MULTIPES. (pl. xi. f. 8.) *Chemn.* (Strombus) 10. pl. 159. f. 1494, 1495. Purpurascens *Swainson*.

T. Sub-ovali, albâ, fusco-maculatâ, spiraliter striatâ, dorso ad angulum tuberculis maximis; infra-angulum costis tribus noduliferis, margine costato; aperturâ sulcis elevatis striatâ, fauce purpureâ; labio externo dilatato, margine fulvo-fasciato, digitis (extra canalem posticam) decem, sub-complanatis,



parvis, anticâ bilobatâ; labio interno angusto, vix sulcato, anticè gibboso, roseâ tincto.

A most beautiful shell, rarely seen in perfection. It is white, beautifully and regularly marked with brown; the outer lip is much dilated, strongly grooved, and banded on the margin between the digitations with pinkish buff; the inside is marked by a tinge of rich purple. There are ten small flattish digitations besides the caudal canal.

10. *P. ELONGATUM*. (pl. xi. f. 4.) *Swains*. Sow. Tank. Cat. *P. Croceum*, *Reeve*. *Conch. Syst.* pl. 248. f. 2.

[G. B. S. Jun. regrets the necessity of changing his opinion, with respect to the relative merits of the two names given above. The author of the Tankerville Catalogue has expressed his assurance that the name *elongatum* was published by Swainson previously to being quoted in that work. The name is also in common use.]

*T.* sub-elongatâ, spiraliter sulcatâ, tuberculis magnis ad angulum, costis noduliferis, infra-angulum; spirâ elongatâ, acuminatâ; aperturâ sub-angustâ; labio externo crasso, margine lato, complanato, intus sulcis albis purpureo interlineatis, striato; labio interno crasso, sulcato, margine distincto, digitis extra canalem anticam octo, quarum unâ posticâ, elongatâ, bilobatâ, tùm unâ sub-rectâ, sub-elongatâ, deinde sex brevibus obtusis.

This species is remarkable for the elongated spire, and the flattened margin of the outer lip, with the short obtuse digitations. The colour is the same as in other species, with purplish black lines between the white grooves of the aperture, and a strong tinge of yellow inside.

#### EXPLANATION OF PLATE XI.

1. *Pteroceras Scorpio* Sp. 6.
2. ——— *Pseudoscorpio*. 7.
3. ——— *Millepeda*. 8.
4. ——— *elongatum*. 10.
5. ——— *Lambis*. 2.
6. ———, var.
7. ———, var.
8. ——— *Multipes*. 9.
9. ——— *rugosum*, var. 5.
10. ———
11. ——— *Aurantia*. 3.
12. ——— *Chiragra*. 4.
13. ——— *truncatum*. Sp. 1.

## MONOGRAPH OF THE GENUS

### P E C T E N.

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*Char. Gen.* Molluscum acephalopodum monomyarium. Testâ interdum liberâ, inæquivalvi, subæquilaterali, biauriculatâ, plerumque radiatim costatâ, atque regulari; cardine rectâ, foveolâ trigonâ centrali cartiliginem recipiente; ligamentum lineare; umbonibus contiguâ.

*Obs.* The bivalve shells included in this genus are free, regular, inequivalve, subequilateral, with a pair of triangular flattened auricles forming the hinge margin in each valve; and ribs radiating from the point of the umbones. The hinge is straight and toothless, with a linear ligament near the edge, and a triangular pit in the centre, containing the elastic substance called the cartilage. In nearly all the species, there is a sinus in the anterior auricle of the lower, or right valve, apparently to admit the passage of a byssus.

In nearly all cases the colouring is much paler in the right valve (therefore considered the lower) than in the left, and in many instances the rich tints and markings which adorn the latter, are entirely wanting in the former.

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#### DESCRIPTIONS.

Sp. 1. *P. MAXIMUS.* (pl. xv. f. 98 to 100.) *Linn. Syst. Nat.* p, 1144.

*T.* subrotundatâ, lateralitèr expansâ, subdepressâ; umbonibus lævibus, marginibus striatis; valvâ sinistrâ propè umbonem concavâ, propè mediam paululùm elevatâ; auriculis magnis, rectangulatis, striatis, cardinè obliquè plicato; costis 12 ad 14 subdepressis, rotundatis, sulcatis, latis; interstitiis sulcatis; colore albo-lutescente, vel fusco-lutescente, fusco vel rubro precipuè ad umbones, angulariter maculato. Long. 6. 50.; lat. 1. 60.; alt. 6.; poll.

A large, rounded, inequivalve species, rather spread at the sides, and having 12 or 14 rounded, sulcated, rather flattish ribs in each valve. It is smooth near the umbones, and in the

upper valve has an elevation between the umbo, which is concave, and the centre. This is the common British and Mediterranean Scallop Shell. Mr. Cuming has a specimen from Brazil.

2. *P. SIMILIS*. (pl. xvi. f. 116. 117.) *nobis*.

*T. P. maximo simillimâ, sed costis in valvâ sinistrâ magis elevatis, magis sulcatis, in valvâ dextrâ læviusculâ; valvâ sinistrâ externè concavâ. Long. 3. 70.; lat. 0. 60.; alt. 3. 40.; poll.*

Differing from *P. maximus* in having the ribs in the upper valve more elevated and more deeply sulcated; the upper valve has not the same elevation near the centre. We have only seen one specimen, which belongs to the Rev. F. J. Stainforth.

Great Britain?

3. *P. JACOBÆUS*. (pl. xv. f. 107. 108. and pl. xvii. f. 153.)

*Linn. Syst. Nat. p. 1144.*

*T. subrotundâ, lateraliter expansâ, subdepressâ; valvâ sinistrâ, propè umbonem concavâ, lateribus elevatis; auriculis latis, rectangulatis, concavis, propè marginem sulcatis; costis 14 ad 16, in valvâ sinistrâ valdè elevatis, rotundatis, concentricè striatis; in valvâ dextrâ valdè elevatis, quadratis, valdè radiatim sulcatis, sulcis moniliformibus, interstitiis concentricè striatis; colore albo-lutescente, vel fusco-lutescente, fusco vel rubro angulariter maculato. Long. 6. 50.; lat. 1. 75.; alt. 6.; poll.*

This British shell differs from *P. maximus* in the character of the ribs, which in the upper valve are much raised and concentrically striated, and in the lower valve are square, elevated, deeply grooved, and deeply undercut.

Great Britain? and Mediterranean.

4. *P. LAQUEATUS*. (pl. xv. f. 101.) *nobis*.

*T. rotundatâ; valvâ dextrâ costis 7, latis, sublævibus, subquadratis, complanatis, obsoletè radiatim sulcatis, utrinque ad laterâ tribus minoribus; interstitiis angustatis, planis; valvâ sinistrâ ignotâ; colore albo, ad umbonem purpureo tincto. Long. 4. 20., lat. 1. 20.; alt. 3. 50.; poll.*

We have only the deep valve of this species. The principal ribs are seven in number, broad, flattened, with subangular edges; there are also three or four smaller ribs on each side; the interstices are narrow. Brought by Capt. Dixon from N. W. America.

5. *P. MEDIUS*. (pl. xv. f. 102, 103, 104. pl. xviii. f. 177, 178.) *Lam. Anim. s. Vert. vi. p. 163. P. lati-costatus, British Museum.*

*T. sub-rotundatâ, sub-depressâ, lævi; valvâ sinistrâ planâ,*

propè umbonem sub-concavâ, lateribus paululùm elevatis; auriculis æqualibus, latis, concavis, propè marginem sulcatis; costis in valvâ sinistrâ 14, angustatis, ad laterâ angulatis, planis, in valvâ dextrâ 16, latis, divisis, depressis, sub-rotundatis; interstitiis in valvâ sinistrâ latis, planis, in medio sub-costatis, in valvâ dextrâ angustatis; colore albo-lutescente vel fusco, rubro-maculato vel rubro, albo-maculato vel purpureo fasciato. Long. 3. 30. lat. 0. 80.; alt. 2. 80.; poll.

The ribs in the upper valve are narrow, and angulated at the side, those of the lower are broad, and generally divided in the centre, the breadth of the ribs in the lower valve corresponding with the broad interstices in the upper.

West Indies.

6. *P. SULCICOSTATUS*. (pl. xiii. f. 35, 36.) *nob.*

T. rotundatâ, radiatim sulcatâ, sub-ventricosâ; auriculis latis, excavatis, striatis; costis 12, in valvâ sinistrâ elevatis, sub-quadratis, sulcatis; in valvâ dextrâ rotundatis, striatis, interstitiis in valvâ sinistrâ mediocris, sulcatis, in valvâ dextrâ sub-nullis; colore valvæ sinistræ pallidè fulvo, rubro-fulgurato, valvæ dextræ purpureo. Long. 1. 65.; lat. 0. 50.; alt. 1. 50; poll.

Rounded, radiately sulcated, rather ventricose; the auricles wide, concave, striated; the ribs 12 in number, in the left valve elevated, rather square, sulcated, in the right valve rounded and striated, with scarcely any interstices. The interstices in the left valve are as wide as the ribs, and sulcated. The colour of the left valve is pale fawn, with angulated streaks of red, in the right valve it is purple. From Mr. Norris's Collection.

7. *P. SUB-VIRIDIS*. (pl. xviii. f. 165, 166.) *nobis.*

T. sub-rotundâ, sub-ventricosâ; valvâ sinistrâ propè umbonem concavâ, lateribus elevatis; auriculis latis, rectangulatis, concavis, propè marginem sulcatis; costis centralibus 13, in valvâ sinistrâ elevatis, rotundatis, lævibus; lateralibus minoribus: in valvâ dextrâ, obsoletè sulcatis, rotundatis, interstitiis concentricè striatis, colore valvæ superioris fusco-viridescente, valvæ inferioris albo, ad umbonem luteo, in medio sub-fusco. Long. 2. 20.; lat. 0. 60.; alt. 2; poll.

Resembling *P. Jacobæus* in form, but less spread at the sides, with the deep valve more ventricose, and the ribs in both valves rounded and nearly smooth; the upper valve is of a greenish brown colour.

8. *P. FUSCUS*. (pl. xvi. f. 118, 119.) *Klein.*

T. rotundatâ, ventricosâ, lævi; valvâ sinistrâ ad umbonem



concarvâ, ad latera paululùm elevatâ; valvâ dextrâ ad umbonem valdè convexâ, ad marginem valvam alteram superante; auriculis latis, rectangulatis, striatis, concavis; costis 14, in valvâ sinistrâ sub-quadratis, angustis, in valvâ dextrâ latioribus, rotundatis, interstitiis planis; colore fusco-nigrescente vel rubescente, intùs fulvo-nebuloso. Long. 3. 50.; lat. 1.; alt. 3. 20.; poll.

Rounded, ventricose, smooth, with the left valve concave at the apex, rather elevated at the sides, the right valve very convex at the apex, overlapping the other valve at the margin; the auricles are wide, rectangular, striated, concave; the ribs are 14 in number, in the upper valve they are narrow and nearly square, in the lower they are wider and rounded, with smooth interstices. The colour is blackish or reddish brown; the inside clouded with light brown.

9. *P. SINENSIS*. (pl. xvi. f. 120, 121, 134.) *nobis*.

T. rotundatâ, ventricosâ, concentricè striatâ; auriculis concavis, striatis, valvâ sinistrâ valdè concavâ, costis centralibus duodecim, quadratis, complanatis, sulcatis, angustatis; lateralibus parvis; interstitiis latis, concentricè striatis; valvâ dextrâ ventricosâ; costis latis 14, rotundatis, obsoletè radiatim sulcatis, interstitiis angustis, margine alteram valvam superante; colore fulvo-rufescente, fusco-maculato, et angulatim lineato. Long 3. 10.; lat. 0. 70.; alt. 2. 70.; poll.

Differing from *P. fuscus* in having the upper valve deeply concave, the ribs flatter, the interstices concentrically striated. The prevailing colour is light reddish brown, mottled with darker brown; near the umbones outside the greater part of the inside and two or three ribs white. China.

10. *P. ZICZAC*. (pl. xvi. f. 129 to 133.) *Linn. Syst. Nat.* p. 1144.

T. rotundatâ, ventricosâ, lævi; auriculis magnis, rectangulatis, distanter sulcatis; valvâ sinistrâ complanatâ, lateribus planis; costis 31, depressis, alternatis, interstitiis angustis, minutissimè striatis; valvâ dextrâ costis viginti quatuor, latis, propè umbonem obsoletis, interstitiis nullis; colore variegato. Long. 3. 60; lat. 0. 90.; alt. 3. 30.; poll.

Rounded, ventricose, smooth; the auricles having one or two broad slightly raised ribs on the upper part; the upper valve flat, with a broad area on each side destitute of ribs, the ribs 31 in number, the intermediate ones filling up the interstices so that only narrow serrated grooves remain; the lower valve radiated with 23 grooves, which are nearly obsolete near the umbones. The variations in colour are numerous,

that of the under valve being generally of a reddish brown, softened into purple or white towards the umbones and auricles; in the upper valve being variegated with white spots, interrupted rays of brown and zigzag lines; in one variety the upper valve is nearly black, and the under valve white, with fulvous lines in the grooves. Mr. Cuming has specimens from the Red Sea and the Philippine Islands.

11. *P. DENTATUS*. (pl. xv. f. 105, 106.) *Sow. Zool. Proc.* 1835. p. 109.

"*T. valdè inæquivalvi, æquilaterali; auriculis æqualibus, valvâ (sinistrâ) planulatâ, sulcato-radiatâ et striatâ, alterâ valdè convexâ, lævigatâ, radiatim sulcatâ, margine ventrali profunde dentato: long. 3. 75.; lat. 1. 5.; alt. 3. 5. poll.*"

The edges of the ribs are deeply cut in the form of teeth, and the edge of the upper valve falls deeply within. *St. Elena*.

12. *P. ERYTHRÆENSIS*. (pl. xviii. f. 163, 164.) — ?

*T. rotundatâ, ventricosâ, lævi; auriculis concavis, magnis; valvâ sinistrâ concavâ, costis concavis, medianis, distantibus novem; ad latera utrinque tribus minoribus; valvâ dextrâ costis duodecim, rotundatis, latis, ad marginem valvam alteram superante; colore albo-lutescente, rubro-variegato, umbonibus purpureo-tinctis, internè fusco-purpurascente. Long. 2. 10; lat. 0. 60.; alt. 2.; poll.*

The general character of this species is similar to that of *P. fuscus*, but the shell is narrower, and the ribs fewer in number and flatter, those in the upper valve being crossed with lines and spots of red. Found in coral sand in the Red Sea.

13. *P. PYXIDATUS*. (pl. xii. f. 24, 25.) *Born. Mus. Cæs. Vind. t. 6. f. 5, 6. Ostræa sulcata*, Gmel.

*T. inæquivalvi, rotundatâ; auriculis sub-æqualibus, magnis, costatis; valvâ sinistrâ complanatâ, propè umbones excavatâ, costis viginti-duobus, angustis; distantibus et minoribus, numerosis, lateralibus, interstitiis latis, complanatis, valvâ dextrâ ventricosissimâ; margine alteram superante, costis lævibus, latis, interstitiis nullis. Long. 2. 40; lat. 0. 60.; alt. 2. 20.; poll.*

Inequivalve, orbicular; the auricles large and nearly equal, with several fine costæ; the upper valve flat, inversely hollowed near the umbones, the ribs, twenty-two in number, are narrow and distant, with some smaller ones at the sides, which are rather elevated, the interstices are wide and flat; the dextral valve is very ventricose, the margin over-reaching the other, the ribs are smooth and wide, with no interstices.

China, Australia, St. Nicholas, Zebu. Sandy mud, 10 fathoms, Mr. Cuming.

14. *P. ASPER.* (pl. xix. f. 196, 197.) *nobis.*

*T.* sub-rotundatâ, sub-compressâ; auriculis latis, obsolete striatis, valvæ dextræ ad marginem serratis; valvâ sinistrâ sub-complanatâ, versus umbones paululùm elevatâ; costis octodecim, angulatis, prope marginem bi-angulatis, angulis serratis, interstitiis angustis, planis, concentricè striatis: valvâ dextrâ ventricosâ, costis octodecim, rotundatis, ad umbonem angulatis, concentricè striatis; interstitiis angustis, planis: colore valvæ superioris pallidè rubro, lineis concentricis minutis strigato, interstitiis rubris, valvæ inferioris albo, lineis paucis, rubris, concentricis; costis rubro interlineatis, umbone rubrotincto. Long. 1. 40.; lat. 0. 30.; alt. 1. 20.; poll.

More flattened than any of the preceding species; the auricles are nearly equal, flat and broad, those of the lower valve serrated at the margin; the upper valve is nearly flat, and very slightly elevated near the umbones; the ribs, eighteen in number, are angulated near the umbones, and the tops flattened so as to form a double angle near the margin; the angles are finely serrated; the lower valve rather ventricose, with the ribs more rounded near the margin than in the other; the interstices in both valves are narrow and flat; a general tint of dull red is made in the upper valve by minute concentric touches on the ribs, and bands in the interstices; these being less numerous and more distant in the lower valve, leave it nearly white. New Guinea. (Mr. Hinds.)

15. *P. INÆQUIVALVIS.* (pl. xix. f. 193 to 195.)——? Portland Catalogue.

*T.* sub-rotundatâ, sub-compressâ, obliquâ, posticè expansâ, concentricè striatâ; auriculis sub-æqualibus, parvis; anticis minoribus; valvâ sinistrâ sub-complanatâ, versus umbones paululùm elevatâ, costis octodecim, sub-angulatis, elevatis; interstitiis angustis, planis; valvâ dextrâ ventricosâ, costis octodecim, elevatis, rotundatis, prope marginem sub-quadratis; interstitiis, angustis, planis; colore valvæ superioris griseo, brunneo-nigrescente aboque maculato; valvæ inferioris alborufescente; costis fusco-maculatis; lateribus griseo-maculatis. Variat valvâ inferiori rubro-maculatâ. Long. 1. 30.; lat. 0. 50.; alt. 1. 20.; poll.

This species, as well as the last, presents a medium between those with the deep lower valve, and those which have both valves deep, the upper valve of this being rather ventricose in

in the centre. It is a thicker shell than the last, with the auricles much smaller, and on the whole more ventricose. Some young specimens were brought from the Philippine Islands by Mr. Cuming.

16. *P. ASPERSUS*. (pl. xix. f. 198, 199.) *Sow. Zool. Proc.* 1835. p. 110.

"T. sub-orbiculari, depressiusculâ, sub-æquivalvi, æquilaterali, auriculis inæqualibus, dextrâ majusculâ, valvarum alterâ radiatim costatâ, pallescente seu albâ, costis quatuordecim majoribus, rotundatis, lævibus, alterâ radiatim costatâ, costis quindecim acutioribus, fuscis, punctulis cærulescentibus aspersis, interstitiis tenuissimè transversim striatis, pallescentibus: long. 1. 4.; lat. 0. 5.; alt. 1. 3.; poll."

This must be distinguished from *P. aspersus*, Lam. that author having applied that name to the species which had been previously named "*danicus*" by Chemnitz. It is rather inequivalve; the rays in the upper valve are more acute than those in the lower.

Tumbez, Peru.

17. *P. NUCLEUS*. (pl. xiv. f. 85.) *Born. Mus. Cæs. t. 7. f. 2.* *Ostrea turgida, dubia? guttata? conspersa?* Gmel.

T. rotundatâ, ventricosâ, sub-æquivalvi, crassâ, costis octodecim ad viginti, elevatis, sub-quadratis, concentricè striatis; interstitiis mediocribus; auriculis parvis, sub-æqualibus, sulcatis, rectangulatis; colore griseo nebuloso, fusco-maculato. Variat albo-rufescente, rubro-maculato. Long. 1. 50.; lat. 0. 90.; alt. 1. 45.; poll.

Rounded, ventricose, nearly equivalve, thick; having from 18 to 20 ribs, which are elevated, nearly square and concentrically striated; colour grey, clouded with greyish brown; or nearly white, clouded with reddish brown.

18. *P. CIRCULARIS*. (pl. xii. f. 23.) *Sow. Zool. Proc.* 1835. p. 110.

"T. sub-orbiculari, tumidâ, sub-æquivalvi, æquilaterali, fusco alboque variegatâ; auriculis magnis, sub-æqualibus; costis radiantibus octodecim; interstitiis latioribus, arcuatim striatis; valvâ alterâ sulcis profundioribus: long. 1. 5.; lat. 0. 8.; alt. 1. 4.; poll."

This species is not so rounded as *P. Nucleus*, and the auricles are larger and less obtuse. "Found in sandy mud at a depth of 7 fathoms."

California and St. Vincent's.

19. *P. VENTRICOSUS*. (pl. xii. f. 18, 19, 26.) nob. *P. tumidus*, *Sow. Zool. Proc.* 1835. p. 109.

"T. sub-inæquivalvi, æquilaterali; auriculis magnis, sub-æqualibus; valvâ alterâ turgidâ, fusco-rufescente albidoque



variegatâ, radiatim octodecim costatâ, costis supernè planulatis, interstitiis transversim striatis, alterâ turgidiore, albicante, radiatim sulcatâ; costis interstitialibus latioribus, planulatis, lateralibus fusco-variis; marginibus ventralibus acutè dentatis: long. 1. 75.; lat. 1.; alt. 1. 75.; poll."

"Found in sandy mud at from 6 to 10 fathoms." The above name is given on account of the name "tumidus" having been previously applied to a small lenticular species. It differs from *P. Nucleus* in having one valve much more ventricose near the apex than the other, in the more trigonal shape, and in the greater flatness of the ribs: it is also generally a much larger shell. St. Elena; and young specimens brought from Calapan, Philippines, by Mr. Cumming.

20. *P. IRRADIANS*. (pl. xvii. f. 139, 140.) *Lam. Anim. s. Vert. vi. p. 173.* *P. turgidus*, *Sow. Genera of Shells. P. concentricus*, *Say.*

*T. rotundatâ, ventricosâ, sub-tenui, concentricè minutè striatâ; auriculis sub-æqualibus, striatis, anticis minoribus, ad basin emarginatis; costis octodecim, rotundatis; interstitiis latis.* Long. 3. 80.; lat. 1. 35.; alt. 3. 50.; poll.

Rounded, ventricose, rather thin, concentrically and minutely striated; the auricles are nearly equal, the anterior rather the smaller; and in both valves emarginated at the base; the ribs, 18 in number, are rounded, with wide interstices. The colour is pale reddish yellow, nearly covered by broad bands and large patches of greyish and reddish brown, a larger portion being left nearly white in the lower valve.

Mediterranean and Newhaven.

21. *P. PURPURATUS*. (pl. xv. f. 113 and pl. xvi. f. 123—125.) *Lam. Anim. s. Vert. vi. p. 166.*

*T. rotundatâ, ad latera expansâ, ventricosâ, crassâ; auriculis sub-æqualibus, radiatim costatis, ad basin emarginatis; costis viginti-duobus, latis, complanatis; lateribus valdè serratis, interstitiis angustis, in medio serratis, ad marginem dentatis; colore purpureo, albo nigroque maculato; variat aurantiaco et etiam albo occurrit.* Long. 4. 80.; lat. 1. 70.; alt. 4. 15.; poll.

More spread at the sides than the last, and thicker, with the ribs, 22 in number, broad, flattened on the top, with serrated edges; the interstices are narrow, having a small serrated rib in their centre. The ground colour is pale purple; the ribs are ornamented with strongly marked festoons of white, purple and blackish brown. Bay of Callao, Peru.

22. *P. GIBBUS*. (pl. xii. f. 1, 2, 17, and pl. xiv. f. 76.) *Linn.*

Syst. Nat. p. 1147. Including *P. Sowerbii*, *Guilding*. *Ostrea principalis*, *flavellum*, *radiata*? *plana*? *crocea*? *florida*? Gmel.

T. rotundatâ, venticosâ, concentricè et radiatum striatâ; ariculis sub-æqualibus, striatis, obtusis; costis octodecim, sub-scabris; valvâ dextrâ quam alterâ paululûm magis ventricosâ; colore vario. Long. 1. 75.; lat. 0. 75.; alt 1. 65.; poll.

Rounded, ventricose, concentrically and radiatedly striated; the auricles are nearly equal, striated and obtuse; the ribs are 18, rather rough; the lower valve rather more ventricose than the upper. The numerous variations in colouring seem to have given rise to many of the specific names quoted above; some are dull brown, others bright red, others delicately pink, mottled with brown, others of a light blue tint, variegated with patches of dark brown and touches of white and yellow. The variety (f. 17.) named *P. Sowerbii*, is from St. Vincents.

Coasts of the Pacific.

23. *P. OPERCULARIS*. (pl. xvii. f. 141 to 146.) *Linn*. Syst. Nat. p 1147. Including *lineolatus*, *Lam.* &c.

T. rotundatâ, sub-ventricosâ, concentricè et radiatum striatâ; auriculis sub-æqualibus, striatis, obtusis, valvæ inferioris anticâ majusculâ, basin emarginatâ; valvâ sinistrâ scabrâ quam alterâ majis ventricosâ, costis octodecim ad viginti, sub-angulatis, interstitiis latis; valvâ dextrâ costis minûs angulatis, interstitiis angustioribus; colore vario. Long. 2. 50.; lat. 0. 95.; alt 2. 30.; poll.

This well known British species differs from *P. gibbus*, in being less ventricose and more dilated at the sides; the ribs are somewhat less elevated, and the upper valve is much more ventricose than the lower. The varieties are numerous, the commonest is light reddish brown, banded and variegated with purplish brown, much lighter on the lower valve; there is also a bright orange variety and a white one. The variety named *P. lineolatus* is white, with a red line on the top of each rib.

Great Britain and Mediterranean.

24. *P. SUB-RUFUS*. (pl. xix. f. 208 to 210.) *Pennant*. Brit. Zool. iv. p. 100. t. 60, 63. *P. Audouini*, Payr. *Ostræa palliata*? Gmel.

T. sub-rotundatâ, sub-compressâ, posticè sub-attenuatâ; scabrâ; auriculis sub-æqualibus, striatis, obtusis, valvæ inferioris anticâ majusculâ, basin emarginatâ; costis viginti, angulatis, angulis serratis, lateribus concentricè striatis; interstitiis scabroso-striatis; colore vario. Long. 2. 50.; lat. 0. 90.; alt. 2. 40.; poll.

Rounded, more oblique and rather flatter than the two preceding, the posterior ventral margin rather enlarged; the auricles nearly equal, with serrated striæ; ribs angular, finely tuberculated. This species differs from the last in shape, in the greater angularity of the ribs, and their rugosity. The varieties are reddish brown, with zigzag white marks; purple, variegated; and pale orange, variegated with brown and white.

Great Britain and Mediterranean.

25. *P. EXASPERATUS*. (pl. xviii. f. 183 to 186.) *nobis*.

*T. rotundato-sub-quadratâ, sub-ventricosâ, scabrâ; auriculis magnis, scabroso-striatis; costis octodecim, sub-angulatis, angulis serratis, lateribus serratim striatis, interstitiis scabroso-striatis; colore vario. Long. 0. 95.; lat. 0. 55.; alt. 1.; poll.*

In the character of the ribs this species resembles the last, they are, however, rather thicker, the shell is more ventricose, less oblique, and has broader auricles. The variations in colour are similar to those of the last species. Mediterranean.

26. *P. BIFRONS*. (pl. 12. f. 9. 10.) *Lam. Anim. s. Vert. vi. p. 164.*

*T. rotundatâ, anticè minùs expansâ, scabrâ; auriculis latis, quadratis, striatis, posticis paululùm minoribus; costis novem paululùm elevatis, rotundatis, duplicatis vel triplicatis; interstitiis latis, radiatum irregulariter costatis; colore valvæ sinistræ pallidè purpureo, costis fuscis nigricantibus, prope umbones maculatis, valvæ dextræ albo, costis rubris, intus purpureo; variat purpureo. Long. 2. 30.; lat. 0. 75.; alt. 2. 20.; poll.*

A nearly equivalve, nearly equilateral shell with nine slightly raised distant ribs, and smaller ribs at the sides and in the interstices; the margin is shaded with light purple, and the ribs are of a deep blackish red colour, excepting near the umbones, where they are spotted. It also occurs with a stronger shade of purple, and the ribs are not so distinctly lineated.

27. *P. PATAGONICUS*. (pl. xiii. f. 60.) *King. Zool. Journ.*

*T. rotundatâ, sub-ventricosâ, sub-lævi; auriculis striatis, obtusis, anticis majoribus; costis 34, sub-quadratis, elevatis, lævibus; colore pallidè fulvo, costis fulvis rubescentibus. Long. 2. 40.; lat. 0. 80.; alt. 2. 40.; poll.*

Rounded, rather ventricose, nearly smooth; the auricles striated, obtuse, the anterior the larger; the ribs, 34 in number, are nearly square, elevated and smooth; the colour is pale fawn, the ribs reddish brown.

Patagonia and the Straits of Magalhaens.

28. *P. SOLARIS*. (pl. xii. f. 7, 8, 22.) *Born. Mus. Cæs. t.*  
6. f. 4.

*T.* rotundatâ, sub-æquivalvi, sub-æquilaterali, complanatâ; auriculis parvis, sub-æqualibus, lævibus; costis octodecim, lævibus, rotundatis, æqualibus, interstitiis latis, transversè sub-striatis; valvæ dextræ costis latioribus, plus minùsve striatis, interstitiis sub-nullis; colore pallidè rubro, lineis spadiceis et maculis albis rubrisque fasciatim maculato, variat albo, rubro fasciatim irregulariter maculato. Long. 2. 15.; lat. 0. 50.; alt. 2. 5.; poll.

Orbicular, nearly equivalve, equilateral, rather flat, auricles small, nearly equal, smooth, ribs 18, smooth, rounded; in one valve the ribs are broader than the interstices; in the other, the reverse, the interstices, which are very narrow in the lower valve, are slightly striated. The colour is pale red, variegated with irregular bands and transverse lines of red and white.

Macassar and China.

29. *P. OBLITERATUS*. (pl. xvi. f. 126.) *Linn. Syst. Nat.*  
p. 1146.

*T.* sub-ovali, lævi, compressâ, internè striatâ, ad marginem dentatâ, utrinque hiantè; auriculis æqualibus, obtusis; colore fulvo, marginibus purpurascens, fasciis rubris radiatim et concentricè picto. Long. 1. 80.; lat. 0. 40.; alt. 1. 90.; poll.

The internal ribs, more numerous in this species than in the following, are visible externally through the semi-transparent substance of the shell. The lower valve is not white, though considerably lighter than the other. China.

30. *P. PLEURONECTES*. (pl. xvi. f. 127, 128, 135, 136.)  
*Linn. Syst. Nat.* p. 1145.

*T.* rotundatâ, sub-ovali, lævi, compressâ, utrinque hiantè; auriculis æqualibus, obtusis; internè costis duodecim, duplicatis, vel viginti quatuor singulis; interstitiis sub-striatis; colore valvæ sinistræ purpureo vel fulvo, vel fusco rubescente, fasciis medianis, radiatis, bi-lineatis; valvæ dextræ albo. Long. 3. 5.; lat. 0. 60.; alt.; 3. 15.; poll.

Rounded, rather oval, smooth, flat, gaping on both sides; the auricles equal, blunt, with 12 pairs of lightly raised linear ribs within. The ground colour of the upper valve is pale greyish fawn, or dark mahogany brown, or purplish pink, lighter near the umbo, and radiated with bands of darker colour, corresponding to the pairs of ribs within, each band defined by a sharp line on either side. China.

31. *P. JAPONICUS*. (pl. xv. f. 109, 110.) *Gmel.* p. 3317.  
No. 8.



*T. rotundatâ, lævi, sub-compressâ, utrinque valdè hiantè ; auriculis æqualibus, obtusis; parvis; internè costis 22, duplicatis, vel 44 singulis; colore valvæ sinistræ rubro, griseo, radiatim fasciato, fusco-rubescente concentricè fasciato, propè umbonem lineato; valvæ dextræ albo. Long. 5.; lat. 1. 20.; alt. 5. 20.; poll.*

Differing from *P. Pleuronectes* in having twice the number of internal ribs, in being rather rounder, and more gaping. The colour of the upper valve is dull red, with concentric lines and bands of a darker tint, with faint light rays.

China and Japan.

32. *P. LAURENTII.* (pl. xvi. f. 137, 138.) *Gmel.* p. 3317. No. 7.

*T. sub-rotundatâ, ad latera sub-angulatâ, lævi; auriculis latis, rectangulatis, marginibus undulatis; valvâ sinistrâ sub-complanatâ, lateribus elevatis, costis internis 47; valvâ dextrâ ventricosâ, ad latera subcompressâ, costis internis 41: colore valvæ superioris rubro-fuscescente, pallidè fulvo-radiato, albo-maculato; valvæ inferioris pallidè fulvo, fusco-radiato, umbone albo. Long. 3. 40.; lat. 0. 75.; alt. 3. 25.; poll.*

Rather rounded, with a rounded angle at each side, smooth; with wide straight auricles, slightly undulated at the margins; the upper valve rather flattened in the centre, and elevated at the sides, the lower valve correspondingly ventricose in the centre; there are about 47 internal ribs; the colour of the upper valve is of a reddish brown, faintly radiated with darker brown, speckled with white; the lower valve has a shade of pale fawn, from the centre to the margins, radiated with pale brown.

China.

33. *P. MAGELLANICUS.* (pl. xvi. f. 122.) *Gmel.* p. 3317. No. 9.

*T. rotundatâ, sub-compressâ, utrinque hiantè, striis numerosis scabris minutis radiatâ; auriculis striatis, latis, rectangulatis; valvâ sinistrâ quam altera magis ventricosâ; colore valvæ sinistræ fusco; valvæ dextræ pallidè fulvo. Long. 3. 80.; lat. 0. 90.; alt. 3. 80.; poll.*

Rounded, rather flat, gaping at both sides, radiated with numerous rough minute striæ; the auricles striated, wide, rectangular; the upper valve more ventricose than the lower; the colour of the upper valve is brown, that of the lower nearly white. This species, notwithstanding its name, does not come from Magellan but from Massachusetts.

34. *P. PSEUDAMUSIUM.* (pl. xix. f. 211. 212. and pl. xx. f. 243.) *Klein. Meth. Ost.* 146. p. 134. l. 9. f. 31. *P.*

exoticus, Chemn t. 207. p. 2037, 2038. *P. dispar?* Lam. *Ostræa hybrida*, Gmel. Dist. 1. 173. f. 10.

*T. rotundatâ*, compressâ, lævi, vel radiatim minutissimè striatâ; auriculis planis, æqualibus; colore cinereo vel pallidè fulvo, maculis magnis fuscis. Long. 1, 30; lat. 0. 37; alt. 1, 30; poll.

This is the true *P. Pseudamusium* of Klein, the *P. Pseudamusium* of Chemnitz being only a variety of his *P. Danicus*. It varies from nearly smooth to being finely striated; though much smaller, it resembles *P. Pleuronectes*, &c. in general form and appearance. Gambia, Africa.

35. *P. GREENLANDICUS*. (pl. xiii. f. 40.) *nob.*

*T. æquivalvi*, orbiculari, sub-compressâ, sub-æquilaterali, pellucidâ, tenuissimâ, lævi; auriculis parvis, obtusangulatis, anticis minoribus; valvâ dextrâ laminâ tenuissimâ, opacâ, indutâ. Long. 1; lat 0, 25; alt. 1; poll.

This white transparent shell is brought from Greenland. We are indebted to Albany Hancock, Esq., of Newcastle, for the loan of the specimen figured.

36. *P. LATI-AURATUS*. (pl. xii. f. 20. 21.) *Conrad. P. Mesotimeris, Conrad, inclusus?*

*T. obliquè sub-quadratâ*, inæquilaterali, tenui, sub-complanatâ; posticè attenuatâ, auriculis obliquis, costatis; umbonibus anticè reclinentibus; costis duodecim rotundatis, lævibus; interstitiis concentricè striatis; colore fusco, albo fasciatim variegato. Variat aurantiaco. Long. 1; lat. 0, 30; alt. 1, 10; poll.

Of a somewhat square shape, very oblique, inequilateral, thin, rather flat, posteriorly attenuated; auricles wide, oblique, costated; umbones leaning considerably towards the anterior side of the shell; the ribs, twelve in number, are rounded and smooth; the interstices concentrically striated; the colour brown, variegated with zigzag marks of white; there is also a plain orange variety. California.

37. *P. TUMIDUS*. (pl. xiii. f. 27. 28. 29.) *Turton.*

*T. rotundatâ*, sub-compressâ, parvâ, tenui, lævi; auriculis magnis, sub-æqualibus; colore pallidè fulvo, rubro fulvoque radiatim maculato, vel albo, vel luteo. Long 0, 22; lat. 0, 8; alt. 0, 22 poll.

A small lenticular smooth species with large auricles. The colour is pale fawn, mottled with red and brown; there are also white and yellow varieties. Collection of A. Hancock Esq.

Cullercoats, Great Britain.

38. *P. ORBICULARIS*. (pl. xx, f. 231. 232.) *nob.*

*T. rotundatâ*, inæquivalvi, lævi, tenui, sub-æquilaterali;

auriculis sub-æqualibus; valvâ sinistrâ ventricosâ; valvâ dextrâ sub-depressâ, auriculâ anticâ validissimè emarginatâ; colore corneo, fusco variegato, intus fusco purpurascente fasciato. Long. 0, 45; lat. 0, 17. alt. 0, 40. poll.

Rounded, inequivalve, smooth, thin, nearly equilateral; the auricles nearly equal; the upper valve ventricose; the lower valve rather depressed, with the anterior auricle widely emarginated; the colour of the upper valve is horny, with a broad sub-marginal band of purplish dark brown, and speckled with lighter brown; the lower valve is much lighter, and has only light brown speckles. British Museum. Co. of Africa.

39. *P. HYALINUS*. (pl. xiv. f. 66. 67.) *Poli.* t. 28. f. 6.

*T.* rotundatâ, lævi, hyalinâ, sub-compressâ; lateribus sub-expansis; auriculis magnis, sub-æqualibus, acutangulatis, planis; colore corneo, rubro, fusco alboque radiatim maculato. Variat immaculato. Long. 1; lat. 0, 39; alt. 0, 95; poll.

Rounded, smooth, glassy, nearly flat, rather expanded at the sides; auricles large in proportion to the shell; the colour is red, with small angulated marks of brown and white arranged in rays; in some varieties there are no spots.

Mediterranean.

40. *P. FLAGELLATUS*. (pl. xiii. f. 41 to 43.) *Lam. Anim.* sans Vert. vi. p. 167.

*T.* rotundatâ, sub-quadratâ, compressâ, tenui, pellucidâ, irregulariter costatâ vel striatâ; auriculis magnis, acutis; colore corneo, ad latera et ad auriculas roseo vel luteo, fusco alboque angulatim minutè variegato, variat fusco-nigrescente. Long. 0. 75.; lat. 0. 16.; alt. 0. 70.; poll.

Of a squarish round shape, thin, nearly transparent, irregularly ribbed or striated, that is, the striæ in some varieties nearly large enough to be called ribs; auricles large, with acute angles, the colour is horny, pinkish or yellowish at the sides and auricles, with minute angular marks of white and brown; and there is also a variety of a blackish brown.

Mediterranean.

41. *P. GLABER*. (pl. xviii. f. 169 to 176.) *Linn.* according to Gmel. *P. flavidulus*, *sulcatus*, *virgineus*, *griseus*, *virgo*, *Lam. Ostræa lutea*? *flavescens*? *aurantia*? *modesta*? *depressâ*? *Gmel. O. citrina*, *rustica*, *Poli.*

*T.* rotundatâ, sub-complanatâ, lævi vel radiatim striatâ; margine expanso; auriculis sub-æqualibus, latis, acutangulatis; costis decem, rotundatis, paululùm elevatis, propè margines evanidis, alternis minùs elevatis; colore vario. Long. 2. 10.; lat. 0. 65.; alt. 2. poll.

Rounded, rather flattened, smooth or radiately striated; spreading at the sides, ears nearly equal, large, but narrowed at the base; ribs 10, rather rounded, slightly raised near the umbones, flattened so as almost to disappear near the margin, the alternate ones much less elevated. The varieties are too numerous to describe particularly. In those which are variegated the markings are broad, angular and defined. Mediterranean.

42. *P. PROTEUS*. (pl. xiii. f. 53, 54 and pl. xiv. f. 83 and 84.) *Solander*. according to Dillwyn. Chemnitz. 207. f. 2042. *P. discors*,—?

*T.* sub-trigonâ, compressâ, sub-inæquivalvi, lævi; vel obsoletè striatâ: auriculis sub-æqualibus, sub-striatis, valvâ sinistrâ alterâ magis ventricosâ, margine alteram superante: costis latis, rotundatis quinque; valvâ dextrâ costis quatuor, latis, sub-duplicatis; colore vario. Long. 1. 65.; lat. 0. 55; alt. 1. 70; poll.

In *P. sulcatus* there are 10 ribs nearly equal in size; in *P. glaber* 5 are large, and the 5 intermediate ones comparatively small; in this species which retains the general form, the intermediate 5 are wanting, but there are gradations between each. The varieties in colour are, plain orange; orange mottled; plain purple; purple mottled; yellow variegated with grey and intermediate rays; and greyish, with beautiful zebra-like markings of brown. Adriatic.

43. *P. SULCATUS*. (p. xviii. f. 179. 180. 181.) *Born*. Mus. Cæs. pl. 6. f. 3.

*T.* rotundatâ, sub-complanatâ, radiatim striatâ; auriculis sub-æqualibus, latis, acutangulatis; costis decem sulcatis, rotundatis, elevatis, æqualibus; colore lacteo, fusco maculato, vel aurantiaco, vel fusco-nigricante. Long. 1. 30; lat. 0. 50; alt. 0. 20. poll.

Rounded, rather flattened, radiately striated; auricles nearly equal, wide, rather narrow at the base; the ribs, ten in number, are sulcated, rounded, elevated, equal, equally raised throughout; the colour is nearly white, spotted with brown; there is a purple variety, and one of a blackish brown colour. The shell here described is unquestionably the true *P. sulcatus* of Born, though possibly *P. sulcatus* of Lamarck may be only one of the numerous varieties of *P. glaber*, from which this species differs not only in having the ribs equal, but in having them as much elevated at the margin as at the umbones.

Mediterranean.

44. *P. UNICOLOR*. (pl. xii. f. 5. 6.) *Lam. Anim. s. Vert.* vi. p. 163.



*T.* rotundatâ, sub-irregulari, inæquivalvi, sub-ventricosâ, sub-lævi; auriculis sub-æqualibus, striatis; valvâ sinistrâ alterâ magis ventricosâ, margine alteram valvam superante; costis novem, rotundatis, sub-distantibus, sub-depressis; valvâ dextrâ sub-complanatâ, costis minùs elevatis; colore auran-tiaco immaculato, vel pallidè roseo, fulvo concentricè fasciato. Long. 1, 70; lat. 0, 50; alt. 1, 50; poll.

Rounded, rather irregular, inequivalve, rather ventricose, nearly smooth; the auricles nearly equal, striated; the upper valve more ventricose than the lower, overlapping it at the margin; ribs nine, rounded, rather distant and depressed; right valve flattish, with less elevated ribs, the colour is plain orange, or a pale red, concentrically banded with light brown.

Black Sea.

45. *P. FLEXUOSUS.* (pl. xix. f. 200 to 205.) *Poli.* *P.* Isabella, Lam. *P. polymorphus*, Jay.

*T.* sub-equilaterali, flabellatim rotundatâ, plus minùsve ventricosâ, lævi vel obsoletè radiatim striatâ; marginibus plerumque inflexis; auriculis sub-equalibus, radiatis, rectis, acutangulatis, ad basin emarginatis: costis quinque, magnis, gradatim elevatis; et interdum quinque parvis intermediis: costis internis duplicatis, ad marginem dentatis: colore vario. Long. 0. 80.; lat. 0. 40.; alt. 0. 75.; poll.

Some varieties of this species are rather difficult to distinguish from *P. glaber*, having smaller ribs between each of the five large elevated ones; the margins are generally inflected: the ribs on the under valve are broader, with a groove in the centre.

Mediterranean.

46. *P. UNDULATUS.* (pl. xix. f. 206, 207.) *nob.*

*T.* *P. flexuoso* simillimâ, sed lateribus magis expansis, marginibus angulatim inflexis, costis magis elevatis; colore, valvæ sinistræ rubro fulvescente, intus purpureo; valvæ dextræ albo, rubro tincto. Long. 1. 30.; lat. 0. 46.; alt. 1. 8.; poll.

The difference between this species and the last will be more easily recognizable from the figure than from the description. It may be observed however that in *P. undulatus* the ribs are more widely divergent, much deeper, and slightly knobbed. The whole shell is radiately grooved, the colour of the upper valve is yellowish red outside and purple inside, that of the under valve is nearly white tinted with rose.

Mediterranean?

47. *P. CLAVATUS.* (pl. xii. f. 14, 15.) *Poli.* Test. 1, 2. f. 17, Including *P. inflexus*, *Poli.* f. 4, 5? *P. aspersus*, Lam?

*T.* rotundato sub-trigonâ, inæquivalvi, sub-æquilaterali de-

pressâ, minutissimè cancellatâ, umbonibus acuminatis, margine ventrali denticulato, plerumque inflexo; auriculis parvis, posticis minoribus; valvâ sinistrâ in medio paululùm excavatâ, costis 5, magnis, elevatis, gradatim declinentibus, propè umbones angulatis, propè marginem inflatis; valvâ dextrâ sub-ventricosâ, costis 4 magnis, elevatis, latis, rotundatis; colore pallidissimè rufo, maculis rubris parvis, et fuscis radiatis variegato; valvæ dextræ albo. Long. 1. 10.; lat. 0. 35.; alt. 1. 20. poll.

This shell differs from *P. Danicus*, in being much narrower, and more elongated towards the umbones; having the margins generally inflected, the ribs larger and deeper, and the upper valve concave. We believe *P. flexuosus*, figured in the same plate of Poli's work, to be a variety of this Mediterranean species.

Sicily.

48. *P. DANICUS*. (pl. xii. f. 16. and pl. xvii. f. 187.) *Chemn. Conch.* 11. t. 207. f. 2043. Including *P. Pseudam-usium*, *Chem.* 7. t. 63. f. 601. 602. *P. aspersus*, *Lam. Ostræa hybrida*, *Gmel.*

*T.* compressâ, sub-circulari, sub-æquilaterali, lævi vel radiatim obsoletè striatâ; costis septem, latis, paucillulùm elevatis, gradatim declinentibus, angulatis, prope marginem evanidis; colore pallidè rubro, maculis rubris, parvis, numerosis, variegato, vel fusco, obsoletè maculato. Long. 1. 60.; lat. 0. 43.; alt. 1. 60.; poll.

A compressed, somewhat equilateral species. The general surface is smooth, obsoletely striated, with seven very slightly raised angular ribs, which are fainter near the margins. The colour is pale red, sprinkled with minute irregular spots of darker red. A variety occurs of a dull brown colour.

Scotland, Denmark?

49. *P. DISTANS*. (pl. xiii. f. 46, and pl. xviii. f. 182.) *Lam. Anim. s. Vert.* vi. p. 169.

*T.* sub-ovali, sub-compressâ, sub-æquilaterali, radiatim striatâ; cardine oblique plicato; auriculis sub-æqualibus, anticis ad basin emarginatis; costis decem, rotundatis, elevatis, crassis; colore griseo, maculis et fasciis fuscis, nigricantibus variegato; intùs fusco. Long. 1. 54.; lat. 0. 61.; alt. 1. 87.; poll.

Rather oval, rather flattened, nearly equilateral, radiately striated; hinge obliquely plicated; auricles nearly equal, narrowed at the base; the ribs, 10 in number, are rounded, elevated and thick; the colour is a light cream, with bands and spots of a very dark brown, inside brown. Specimens

have been brought to this country by Mr. Cuming from Mindoro and Calapan, Philippines. Atlantic Ocean, *Lam.*

50. *P. RASTELLUM*. (pl. xiii. f. 30.) *Lam. Anim. s. Vert.* vi. p. 166.

*T.* rotundatâ, compressâ; auriculis magnis, radiatim striatis, marginibus erecto-squamatis; costis novem, gradatim declinentibus, tribus medianis rotundatis, squamis minutis; lateralibus angulatis, squamis rectis, acutis; colore aurantiaco, costarum interstitiis angulatim fusco-maculatis, lateribus maculatis; vel albo, fusco maculato. Long. 1. 40.; lat. 0. 40.; alt. 1. 25.; poll.

A compressed, nearly equilateral species, with the auricles large, radiately striated, margined at the base, with erect sharp scales on the edges. Ribs 9, gradually shelving down, the three centre ones rather large and rounded, with small triangular scales on the top; the lateral ones rather smaller and angulated; the scales on the extreme ones sharp and erect. This species is distinguished from *P. squamatus*, (figured in Reeve's "Conchologia Systematica" as *P. Rastellum*, *Lam.*) in being regular, and smooth, having the sides of the ribs undefined, and the scales small in proportion. Our authority for the identity of this species is that of Delessert, who has figured several varieties in his work on the Lamarckian species. Mr. Norris's collection. "Habite les Mers du Nord," *Lam.*

51. *P. PICTUS*. (pl. 20. f. 233.) *nob.*

*T.* obliquè ovatâ, compressâ; auriculis sub-æqualibus, margine serrato, radiatim sulcatis, ad basin emarginatis; lateribus striatis; costis 13, triangulatis, elevatis, lævibus; interstitiis angustis, bi-sulcatis, crenatis: colore pallidè fulvo, fasciis et punctis et lineis rubris variegato; intus albo; Long, 0. 80.; lat. 0. 25.; alt. 0. 85.; poll.

Obliquely oval, flat, ears nearly equal, with the edge of that in the under valve, serrated; radiately striated, emarginated at the base; at each side of the shell there is a small space slightly striated; ribs 13, square at top, with slanting sides; interstices narrow, defined by two small grooves, and crenulated; colour, dull white, with broad irregular bands, fine transverse lines, and spots of variegated red. Isle of Baicus. Mr. Cuming.

52. *P. SUPERBUS*. (pl. xii. f. 11.) *nob.*

*T.* sub-ovali, obliquâ, posticè expansâ, compressâ, crassâ; auriculis parvis, obtusis; costis 23, crassis, rotundatis, lævibus, interstitiis angustis; colore propè umbones roseo, propè margines, pallidè luteo, fasciis rubris, præruptis, angulatis variegato. Long. 2. 40.; lat. 0. 65.; alt. 2. 60.; poll.

A flat, solid, obliquely oval shell; the auricles small, obtuse; with 23 rounded smooth, thick ribs; general colour, pale straw, pale pink near the umbones, variegated with interrupted angular bands of brightish red. We have only seen one specimen of this magnificent shell which is in the collection of Mr. Cuming.

53. *P. HISTRIONICUS*. (pl. xx. f. 240.) *Gmel.* p. 3326. No. 54.

T. obliquè sub-ovali, compressâ, sub-æquivalvi; valvâ dextrâ magis ventricosâ, auriculis striatis, posticis minoribus, anticis ad basin emarginatis; costis valvæ sinistræ 15, rotundatis, lateribus serratis, tribus lateralibus; valvæ dextræ duodecim, centralibus lævibus, lateralibus serratis; colore albo, valvæ sinistræ costis alternis nigro, alternis rubro, maculatis. Long. 1. lat. 0. 18.; alt. 0. 21.; poll.

A flat shell rather spread out at the sides, and slightly elongated at the posterior ventral margin; the lower valve is slightly ventricose, and the upper valve flat; the 7 central ribs are broad, rounded, smooth on the top, and serrated at the edges; the 3 lateral ribs on each side are much narrower, and serrated across, those of the under valve being 12 in number, and the lateral ones only serrated: ground colour nearly white; some of the ribs of the upper valve spotted with red, the intermediate ones with black.

Ceylon and Singapore.

54. *P. RADULA*. (pl. xvii. f. 154, 155.) *Lin. Syst. Nat.* p. 1145. *Ostrea maculosa*? *Gmel.*

T. sub-trigonâ, crassâ, compressâ, scabrâ, radiatim sulcatâ, ad marginem posticè sub-elongatâ, ad latera sub-quadratâ auriculis sub-æqualibus, obtusis, ad basin emarginatis, rugosis, sulcatis, costis novem ad duodecim, elevatis, sub-quadratis, crassis, sulcatis, concentricè lyratim striatis; interstitiis latis, sulcatis; cardine obliquè plicato; colore pallidè luteo, nigro fuscoque maculato, vel fusco latè fasciato et maculato. Long. 3. 40.; lat. 0. 80.; alt. 3. 80.; poll.

Rather trigonal, thick, rough, nearly equilateral, the posterior margin slightly produced, and the sides flattened, the auricles nearly equal, roughly ribbed; the ribs vary in number from nine to twelve, they are thick, elevated, rather square, radiately grooved, and concentrically striated; the interstices are of the same shape, inverted; hinge obliquely plicated; the ground colour is pale yellowish, spotted with brown or black, sometimes nearly covered with broad brown bands.

Ceylon.

55. *P. VELUTINUS*. (pl. xiii. f. 31.) *nob.*

T. sub-ovali, sub-compressâ, æquilaterali, radiatim leviter striatâ, ad marginem sub-inflatâ; auriculis sub-æqualibus,



striatis, margine obliquè plicato: costis quinque, crassis, rotundatis, gradatim declinentibus; colore fulvo-rufescente, fasciis albis, angulatis, subtùs fusco-marginatis variegato, intùs albo. Long. 1. 15.; lat. 0. 37.; alt. 1. 25; poll.

Nearly oval, rather flat, equilateral, with fine radiating striæ, rather swelled at the margin; the auricles nearly equal, striated; hinge obliquely plicated; the ribs, 5 in number, rounded, shallow, of a dull fawn colour, variegated with angular bands of white, margined with brown. The whole surface of the shell has a somewhat velvety appearance.

Macassar, Mr. Hinds.

56. *P. NODULIFERUS*. (pl. xiii. f. 38, 39 and pl. xvi. f. 94.) nob.

T. sub-trigonâ, sub-compressâ, radiatim striatâ, æquivalvi; auriculis radiatim sulcatis, anticis paululùm majoribus; cardine obliquè plicato; costis octo, crassis, rotundatis, nodulosis, internè ad marginem plicatis; colore rufo, intùs nebuloso, extùs angulatim maculato. Long. 1. 35.; lat. 0. 50.; alt. 1. 46.; poll.

Rather trigonal, rather compressed, radiately striated, equivalve; the auricles radiately sulcated, the anterior ones rather larger than the posterior; hinge obliquely plicated; the ribs, 8 in number, are thick, rounded, slightly knobbed, internally plicated at the margin; the colour is red, clouded inside, with defined angular spots outside. This species differs from *P. corallinoides* in being more angular and compressed, less spread at the sides, and having the nodules less distinct. Mr. Morris's collection.

57. *P. SUBPLICATUS*. (pl. xiii. f. 37, and pl. xiv. f. 72, 73, 81.) nob.

T. æquivalvi, sub-trigonâ, sub-æquilaterali, depressâ, radiatim striatâ; internè lævi, leviter undulatâ; auriculis magnis, striatis, posticis majoribus, sub-rectangulatis; cardine obliquè plicato; costis quinque, latis, vix elevatis, interstitiis latoribus; colore pallidè fulvo, fusco-nigrescente, angulatim variegato. Long. 1. 45.; lat. 0. 45; alt. 1. 57.; poll.

Rather flat, nearly equilateral, and radiated with fine striæ; the auricles are broad, the posterior ones rather broader than the anterior; the hinge is obliquely plicated; the ribs, 5 in number, are slightly elevated; the ground colour is light cream, with broad angular patches of dark blackish brown, or brick red; a great part of the inside is brown, particularly about the hinge. The obliquity of the plicæ on the hinge, the flatness of the shell, and the slight elevation of the ribs, serve to distinguish this species from *P. Plica*. Amboina.

58. *P. PLICA*. (pl. 20. f. 237 to 239.) Lin. Syst. Nat. p. 1145.

*T. rotundatâ, sub-trigonâ, ventricosâ, crassâ, radiatim striatâ, prope umbones complanatâ; auriculis parvis, sub-æqualibus, obtusis, striatis, ad latera coarctatis: cardine plicato; costis tribus centralibus, crassis, rotundatis, et quatuor lateralibus minoribus, intûs dentato-plicatis; colore vario, plerumque maculis magnis fasciatim variegato, cardine fusco. Long. 1. 40.; lat. 0. 60.; alt. 1. 30.; poll.*

Of a rounded, trigonal form, ventricose, thick, radiately striated; the auricles small, nearly equal, blunt, striated, contracted at the sides; hinge perpendicularly plicated; there are 3 central ribs, and 2 on each side much smaller; the colour is various, generally a light ground variegated with large patches of a darker colour, the hinge nearly always brown.

Nicobar. Ceylon. China.

59. *P. CORALLINOIDES*. (pl. xii. f. 3, 4.) D'Orb. Mollusc. p. 102. *Ostræa vittata, sub-rotundata*, Gmel.

*T. rotundatâ, ventricosâ, æquivalvi, radiatim striatâ, posticè productâ; auriculis sulcatis, obtusis, anticis majoribus, ad basin emarginatis, cardine obliquè plicato; costis decem, crassis, latis, parallèlè nodosis, intûs dentato plicatis; colore rubro, nebuloso, costis alternis pallidioribus. Long. 2. 10.; lat. 1; alt. 1. 90.: poll.*

A rounded shell, with nodular ribs. Differing from *P. nodosus* in being much smaller when full grown, much more finely striated, more ventricose, and more spread at the sides, having the ribs equal, and the knobs less considerable.

60. *P. MAGNIFICUS*. (pl. xv. f. 114.) Sow. Zool. Proc. p. 109. 1835.

"*T. sub-æquivalvi, æquilaterali, auriculis inæqualibus, striis radiantibus, exiguis, numerosissimis, radiisque tredecim, crassiusculis, rotundatis, nonnunquam sub-nodosis, intûs albâ, purpureo marginatâ: long. 5. 5.; lat. 2.; alt. 5. 5.; poll.*"

The colour is bright red. Mr. Cuming's collection.

East Columbia.

61. *P. SUB-NODOSUS*. (pl. xv. f. 97. 112.) Sow. Zool. Proc. p. 109. 1835.

"*T. sub-æquivalvi, æquilaterali, auriculis inæqualibus, striis radiantibus, numerosissimis, radiisque decem, crassis, rotundatis, alternatim nodoso-vesicularibus vel sub-nodosis, intûs plerumque purpureo signatâ. Long. 5. 25.; lat. 2. 75.; alt. 5.; poll.*

Var. 1. Brownish red with white striæ, from California.  
 Var. 2. Variegated with brown and white patches, from Isl. Plata, East Columbia. Var. 3. A more depressed shell, of a bright orange colour, from Tehuantepec Bay, Mexico. The examination of a number of specimens has led me rather to consider this proposed species as only presenting a variation of *P. nodosus*, in which the knobs are not so large or conspicuous.

62. *P. nodosus*. (pl. xv. f. 115 pl. xvii. f. 147.) *Linn. Syst. Nat.* p. 1145. *Ostr. decemradiata*, Gmel? *Pecten corallinus*, D'Argenville.

*T. rotundatâ, ventricosâ, sub-æquilaterali, æquivalvi, radiatim sulcatâ: auriculis inæqualibus, sulcatis; anticis majoribus, ad basin emarginatis: cardine plicato: costis novem, crassis, nodulos rotundos excavatos ferentibus, alternis minoribus; internè duplicatis, ad marginem dentatis: long. 5. 20; lat. 1. 50.; alt. 5. poll.*

This well known species, which has large knobs on the ribs, is generally of a reddish brown colour, but it occurs also of a bright orange. The auricles are unequal, the hinge plicated and the whole surface roughly sulcated.

Brazil and Isle of France.

63. *P. muscosus*. (pl. xix. f. 225.) *Wood Suppl. Ind. Test.*

*T. sub-quadratâ, ventricosissimâ, æquilaterali, æquivalvi scabrâ; auriculis inæqualibus, elongato-acutis, scabroso-sulcatis, basin emarginatis, anticis longioribus; umbonibus prominentibus: costis 18 scabris, sub-angulatis, ad angula spinas breves rectas ferentibus; ad marginem dentatis: colore fusco rufescente, intùs fulvo. Long. 1. 20.; lat. 0. 80.; alt. 1. 30.; poll.*

Ventricose, equilateral, equivalve, rough; with elongated, unequal ears, and 18 ribs, which have small, erect spines on their angles: colour reddish brown. The only two specimens we have seen are in Mr. Cuming's cabinet.

64. *P. rugosus*. (pl. xix. f. 226.) *Nobis. Zool. Proc.* 1842.

*T. ovali, ventricosâ, crassâ, scabrâ, æquivalvi, sub-æquilaterali: auriculis inæqualibus, scabroso-sulcatis; posticis minoribus; anticis basin emarginatis: costis 20, elevatis, squamis annulatis, angulis serratis. Interstitiis lævibus. Colore, pallidè fulvo, maculis obscuris, fuscis, variegato. Long. 1. 12.; lat. 0. 55.; alt. 1. 25.; poll.*

Oval, ventricose, thick, rough, equivalve, nearly equilateral, ears unequal, roughly grooved; ribs 20, elevated, undercut, with numerous small annulated scales, and serrated edges.

Interstices smooth. Ground colour pale yellowish, obscurely mottled with smoky brown. Bureas, Philippines. Mr. Cuming.

65. *P. PES-FELIS*. (pl. xvii. f. 162. pl. xx. f. 234.) *Lin. Syst. Nat.* p. 1146. Bornii, *Payr. O. corallina, Poli.*

*T.* ovali-subtrigonâ, compressâ, scabrâ, radiatim sulcatâ, æquivalvi, sub-æquilaterali, crassâ; auriculis inæqualibus, nodoso-sulcatis: posticis parvis, anticis magnis: costis 8, crassis, latis, elevatis, sulcatis. Interstitiis latioribus, sulcatis. Colore, fusco-rubescente, fasciis nigris, et maculis albis variegato; variat purpureo. Long. 2. 50.; lat. 0. 72.; alt. 2. 90.; poll.

A well known species from the Mediterranean and also from the Persian Gulf.

66. *P. PARVUS*. (pl. xx. f. 227-8.) *G. B. Sowerby, Sen. Zool. Proc.* 1835. p. 110.

*T.* subovatâ, depressiusculâ, sub-æquivalvi, æquilaterali, albicante: auriculis inæqualibus, graniferis: valvis radiatim costatis; costis 8, inæqualibus, transversim striatis: interstitiis radiatim sulcatis et transversim striatis: Long. 0. 75.; lat. 0. 25.; alt. 0. 80.; poll.

"Found in coral sand on the reefs." Lord Hood's Island. Mr. Cuming.

67. *P. IMBRICATUS*. (pl. xiii. f. 32-3.) *Gmel. p.* 3318. No. 12. sauciatus *Gmel. Chem. t.* 69. f. H.

*T.* sub-trigonâ, complanata, sub-lævi, sub-æquivalvi: auriculis inæqualibus, complanatis, ad marginem nodosis: posticis parvis, obtusis: anticis magnis, acutis: valvâ sinistrâ complanatâ: costis 9, rotundato sub-angulatis, tuberculatis, fornicatis, globosis ferentibus: alternis depressis: valvâ dextrâ, sub-ventricosâ, costis noduliferis æqualibus 10. Colore albo, roseo-maculato, costis alternis rubro maculatis, intus ad marginem purpureo, medio luteo; nonnunquam occurrit purpureo immaculato. Long. 1. 35.; lat. tuberculis exclusis 0. 40; alt. 1. 55; poll.

This flat trigonal species is remarkable for the hollow imbricated tubercles which are placed at nearly equal distances on 9 alternating ribs. I believe that the figure in Chemnitz referred to by Gmelin for *P. sauciatus* is only a variety of this species in the state most common in collections, having the knobs worn down. Red Sea.

68. *P. RUBROMACULATUS*. (pl. xiii. f. 34.) *nob.*

*T.* ovali-subtrigonâ, æquivalvi, sub-æquilaterali, sub-compressa: auriculis inæqualibus, scabroso-sulcatis: posticis parvis; anticis magnis, costis 18, prope marginem squamosis, alternis depressis, minoribus, interstitiis læviter striatis: costis



valvæ dextræ, numerosis, minutè squamosis, inæqualibus: colore sulphureo, costis alternis depressis, rubro maculatis. Long. 0. 92.; lat. 0. 30.; alt. 1.; poll.

The only specimen of this shell with which we are acquainted is in the collection of the Rev. F.J. Stainforth. The ribs are scaly near the margin, the intermediate ones, which are more depressed, have spots of a deep red colour in the centre of the shell.

69. *P. TIGRIS*. (pl. xiv. f. 95-6.) *Lam. Anim. sans Vert.*

T. sub-æquivalvi, obliquè sub-trigonâ, sub-complanatâ, sub-scabrosâ, internè validè costatâ; auriculis inæqualibus, sulcatis, posticis parvis, anticis acutangulatis; costis 11, valide sulcatis, supra sub-angulatis, lateralibus parvis; interstitiis sulcatis, latis: colore albo, supernè lutescentè, fasciis fuscis rufescentibus, angulatis maculato, intus luteo, cardine nigro, maculâ roseâ ad basin auriculæ anticæ in valvâ dextrâ. Long. 1. 40; lat. 0. 40; alt. 0. 60; poll.

The right valve of this species is a little deeper than the left, contour somewhat oblique and lengthened posteriorly, having 11 longitudinally sulcated ribs, the lateral one on each side very slightly raised. The colour is nearly white, tinged with yellow, marked with tiger-like stripes of dark reddish brown, the inside is yellow with a black band on the hinge, and a pink spot at the base of the anterior auricle of the upper valve.

Indian Ocean, Lam. Isle Masbate, Philippines, Mr. Cuming.

70. *P. MADREPORARUM*. (pl. xiv. f. 68.) *Petit.*

T. obliquè ovatâ, compressâ, irregulari, radiatim striatâ; auriculis inæqualibus, anticis magnis, posticis parvis: costis 7 obsoletis, distantibus: colore albo, nigro maculato. Long. 0. 66.; lat. 0. 10.; alt. 0. 80.; poll.

This small, white, flat, oval, black-spotted shell is found in holes of Madrepore. It is from the Red Sea.

71. *P. TEGULA*. (pl. xiv. f. 90.) *Wood's Index.*

T. sub-quadratâ, irregulari, sub-æquivalvi, compressâ, foliaceâ; auriculis inæqualibus, anticis maximis, valvæ dextræ anticâ validissimè emarginatâ; costis, valvæ sinistræ, 9 ad 13 crassis, irregularibus, inæqualibus; squamas crassas, sub-quadratas, ferentibus: interstitiis irregulariter radiatim sulcatis; costis, valvæ dextræ, numerosis, squamiferis: colore, fusco, paululum variegato. Long. 2. 85.; lat. 0. 90.; alt. 3. 20.; poll.

More irregular and more spreading at the sides than the following, with the ribs fewer and thicker; the scales thicker and more square, and the anterior auricles much broader.

Japan.

72. *P. LIVIDUS*. (pl. xiii. f. 61. pl. xiv. f. 89 et 91.) *Lam. Anim. s. Vert. vi. p. 178. P. sulphureo, Lam. et Ost. Tegulo. Wood. inclusis.*

*T. irregulari, sub-ovali, sub-æquivalvi, compressâ, foliaceâ; auriculis inæqualibus, magnis, anticis majoribus, valvæ dextræ, anticâ validissimè emarginatâ; costis 16 ad 20, inæqualibus vix elevatis, squamas numerosas, acutas ferentibus; interstitiis irregulariter radiatim sulcatis: colore, fusco variegato, squamis luteis vel albis; variat fusco paululum variegato, squamis ferè obsoletis; variat quoque sulphureo. Long. 2. 5.; lat. 0. 70; alt. 2. 25; poll.*

An irregular, compressed, foliaceous species, with 16 to 20 irregular, unequal ribs, having numerous thin scales which are nearly obsolete in some varieties; the ribs of the lower valve are more numerous. The general colour is variegated purplish brown, with the scales white or yellow; there is a variety scarcely mottled, and another of an uniform sulphureous tint.

Red Sea and Japan.

73. *P. SQUAMOSUS*. (pl. xiii. f. 48, 49, 50. pl. xiv. f. 88, 92, 93.) *Gmel. O. anonyma, Lam. et P. hybridus, Lam. inclusis, O. hybrida, Gmel. exclusâ. P. arausicanus, Chemn.*

*T. irregulari, sub-ovali, sub-æquivalvi, complanatâ, foliaceâ; auriculis inæqualibus, magnis, anticis majoribus, valvæ dextræ anticâ validissimè emarginatâ; costis 12 ad 18, ferè obsoletis, squamiferis, ad umbones evanidis, valvæ dextræ numerosis, paululum angulatis; colore vario, aliquando propè umbones albo fulgurato. Long. 1. 85.; lat. 0. 50.; alt. 2. 10.; poll.*

The figure in Lister referred to by Gmelin, leaves no doubt of the identity of this species, which is remarkable among the irregular foliaceous group, for a peculiar flatness, particularly at the umbones. The varieties are numerous, many of them being marked with fine zigzag lines of white.

Northern Ocean.

And also brought from the Philippines by Mr. Cuming.

74. *P. SERRATUS*. (pl. xiii. f. 56.) *nob.*

*T. obliquè ovali, irregulari, posticè sub-productâ, sub-compressâ, auriculis inæqualibus, posticis minoribus, costis numerosis, minutissimè squamiferis; colore sulphureo, maculis magnis, fuscis, variegato, intus ad marginem purpureo. Long. 1. 20.; lat. 0. 50; alt. 1. 40; poll.*

More ventricose, more oblique, with the auricles smaller and the scales more minute than *P. squamosus*. Brought from the Philippine Islands by Mr. Cuming.

75. *P. IRREGULARIS*. (pl. xiii. f. 51-2.) *nob.*

*T. obliquè ovatâ, irregulari, sub-æquivalvi; auriculis in-*

æqualibus, scabroso-sulcatis, posticis parvis, obtusis; anticis magnis, acutis; costis numerosis, parvis, scabris, sub-angulatis; colore, miniaceo, radiis septem, albo purpureoque maculatis: umbonibus albis, purpureo, rubroque maculatis: variat purpureo, nigro maculato. Long 1, 20, lat 0, 42; alt 1, 45.; poll.

A rather flat, obliquely-oval, irregular species, with unequal auricles and numerous serrated close set ribs. The under valve is rather more ventricose than the upper. The colour is scarlet with seven rays of interrupted white, mottled with purple; near the umbones the shell is white, mottled with purple. Collection of the Rev. F. J. Stainforth.

Mr. Sowerby has a purple variety.

76. *P. squamatus*. (pl. xiii. f. 57, 58.) *Gmel.* p. 3329. *Lister.* t. 183. f. 20.

*T.* rotundato-sub-trigonâ compressâ, irregulariter sub-æqui-valvi; valvâ sinistrâ paululûm convexiori; auriculis magnis, costatis, aculeato-squamiferis, anticâ latâ, sub-acutangulatâ; costis alterius valvæ quinque ad septem, latis, lævibus, rotundatis, aculeato-squamiferis, irregularibus, quindecim minoribus, interstitialibus, interstitiis minutissime punctatis, alterius costis irregularibus, squamiferis, inæqualibus; colore brunneo-rufescente, costis magnis squamiferis rubris; variat testâ albâ. Long. 1. 75.; lat. 0. 50.; alt. 1. 85.; poll.

A smooth flattish shell, with from 5 to 7 broad ribs, with large elevated scales, the intervals being filled up with several narrow ribs in each. The ground colour is dull clouded brown, relieving the principal ribs, which are red. An inspection of the figure in *Lister*, referred to by *Gmelin*, will remove all doubts as to the identity of our shell, which has been erroneously figured in *Reeve's "Conchologia Systematica,"* as *Rastellum*, *Lam.* The white variety is figured by favour of Miss *Saul*.

77. *P. brueii*. (pl. xx. f. 241, 242.) *Payr.* *Moll.* p. 78. pl. 2. f. 10, 11.

"*P.* testâ sub-rotundatâ, æquivalvi, sub-æquilatâ, flavâ; radiis valvæ superioris variis, alternis minoribus, in longum lineatis et tenuiter squamosis; radiis valvæ inferioris binis, etiam lineatis et papillosis; auriculâ alterâ minimâ; novem ad undecim lineas lata."

"Hab. les Golfes de Sagone, d'Ajaccio, de Valineo, de Porto Vecchio,..... Peu abondant."

The rays of the upper valve alternate irregularly in size, they are slightly annulose or papillary; those of the lower are also irregular and papillary, but are disposed in pairs. The

shell, which is sub-trigonal, flat and irregular, bears some resemblance to *P. Pusio*, but the ribs are much larger and more rugose. Corsica.

78. *P. ACULEATUS*. (pl. xiii. f. 47.) *Jefferys* Conchological Magazine. *P. vitreus*, Var. Chemn. t. 67. f. 637. *b*.

*T. æquivalvi*, sub-ovali, tenui, radiatim striatâ, striis punctis elevatis, minutè aculeatis; auriculis inæqualibus: posticâ parvâ, anticâ magnâ, alterius valvæ, validè emarginatâ; colore pallidè luteo, rubro-nebulato. Long. 0. 80.; lat. 0. 20.; alt. 0. 90.; poll.

The specimen from which our figure is taken was found in breaking up a mass of a British species of *Serpula*. It is identical with the shell figured by Chemnitz in association with, and as a variety of, his *P. vitreus*, which however, according to his own statement, is quite distinct. Great Britain.

79. *P. VITREUS*. (pl. xiv. f. 86-7.) *Chemn.* t. 67. f. 637. *a*.

*T. parvâ*, compressâ, æquivalvi, sub-æquilaterali, radiatim striatâ, albâ, griseo-punctatâ; auriculis latis, sub-æqualibus. Long. 0. 40.; lat. 0. 10.; alt. 0. 50.; poll.

The small shell here figured, which was brought by Mr. Cuming from Sorsogon, resembles the figure given by Chemnitz t. 67. f. 637, *a*. for the first variety of his *P. vitreus*. which, from the description, as well as from the figure, differs entirely from the shell figured as a second variety, the *P. aculeatus* of Jefferys.

80. *P. CORNEUS*. (pl. xiii. f. 44-5. pl. xx. f. 244-5.) *nobis*.

*T. pellucidâ*, tenui, æquivalvi, rotundato-ovali, obliquè sub-æquilaterali; auriculis inæqualibus, costatis, ad basin striatis, posticâ parvâ, anticâ magnâ, costis lævibus, indistinctis, planulatis, numerosis, interstitiis concentricè minutissimè striatis. Long. 0. 47.; lat. 0. 25.; alt. 0. 52.; poll.

A light transparent species, of a horny colour and texture: the anterior auricles are much larger than the posterior, the ribs are irregular, very slightly raised, flattened and smooth: the interstices are very finely striated across. When young, the shell is radiated by several bands of brown. Magellan.

81. *P. OBSOLETUS*. (pl. xiv. f. 74, 75, 79.) *Pennant*. Brit. Zool. t. 61. f. 66. *Tigerinus*, Müller. *domesticus*, Chemn.

*T. ovali* sub-trigonâ sub-ventricosâ, æquivalvi, sub-æquilaterali, lævi vel obsoletè striatâ, auriculis valdè inæqualibus, posticis minimis, anticis magnis, sulcatis; colore, valdè vario, plerumque maculis purpureis, albis, luteisque variegato. Long. 0. 84.; lat. 0. 30. alt. 0. 90.; poll.

Oval, inclining to triangular, nearly equilateral, æquivalve,



radiately striated or nearly smooth, with the auricles very unequal; the posterior being very smooth. The colouring is various, most commonly consisting of large spots of purple and white upon a ground of light purple or yellow. Great Britain.

82. *P. HASTATUS*. (pl. xx. f. 236.) *nob.*

*T. ovali subtrigonâ, subelongatâ, scabrâ; auriculis inæqualibus, posticis minimis, anticis magnis, scabroso-sulcatis: valvâ sinistrâ, costis 8, inæqualibus, valdè elevatis, angulatis; spinas numerosas, erectas, subcrispatas ferentibus. costis interstitialibus numerosis, inæqualibus, serratis: valvâ dextrâ, costis 22, angulatis, spinosis; colore rubro, intus albo. Long. 0. 95.; lat. 0. 30.; alt. 1. 15.; poll.*

Oval, inclining to triangular, rather elongated, rough; with very unequal ears, the posterior ones being very small; the upper valve has eight unequal, elevated, angular ribs, with numerous erect, slightly curved, sharp spines, and several smaller spinose ribs in the interstices. The lower valve has 22 more nearly equal ribs with more numerous and smaller spines on the angles. The only specimen we have seen is in the collection of the Rev. F. J. Stainforth.

83. *P. PUSIO*. (pl. xiv. f. 62, 3, 4, 5,) *Lin. Syst. Nat.* p. 1146: palliolum Chem.

*T. ovali, subæquivalvi, inæquilaterali, subirregulari, radiatim scabroso-sulcatâ, sulcis in valvâ dextrâ, duplicatis: auriculis inæqualibus, posticis minimis, anticis magnis, ad basin emarginatis, scabroso-sulcatis; colore vario, plerumque variegatâ. Long. 0. 80.; lat. 0. 95.; alt. 1.; poll.*

The above name has been erroneously applied to the irregular attached shell properly called *Hinnites sinuosus*. The shells are somewhat similar in their young state. This species has numerous small rough ribs which are doubled in the lower valve. Mediterranean.

84. *P. ORNATUS*. (pl. xiv. f. 77, 78, 89.) *Lam. Anim. sans Vert. vi.* p. 176.

*T. ovali subtrigonâ, compressâ, æquivalvi, scabrâ: auriculis inæqualibus, posticis minimis, anticis magnis, acutis, sulcatis; costis valvæ sinistræ numerosis inæqualibus, alternatim majoribus-valvæ dextræ, duplicatis. Interstitiis scabris; colore pallidissimè fulvo, maculis elongatis, undulatis, fasciatim variegato, plerumque costis tribus, albis; occurrit etiam, rubro, prope umbones solum maculato. Long. 0. 93.; lat. 0. 30.; alt. 1. 10.; poll.*

Oval, nearly triangular, rather flat, equivalve; auricles unequal, the posterior extremely small: the ribs of the upper

valve are numerous, unequal, rather undercut, crenulated, the alternate ones most prominent: those in the under valve are doubled. The colour is nearly white, variegated with undulating banded patches of deep red; these patches are generally interrupted by three of the ribs being white; a variety occurs in which the dark red is spread nearly over the entire surface of the shell. Atlantic Ocean.

85. *P. ALBOLINEATUS*. (pl. xiv. f. 69.) *nob.* Zool. Proc. 1842.

*T.* ovali subtrigonâ, compressâ, æquivalvi; auriculis inæqualibus, posticis minimis, anticis magnis, acutis, sulcatis: costis numerosissimis, æqualibus, subquadratis. Interstitiis lævibus. Colore palidissime; luteo valvæ dextræ, costis griseo maculatis, valvæ sinistræ, costis griseis, lineis albis interruptis, costis tribus albis. Long. 0. 93.; lat. 0. 25.; alt. 1. 19; poll.

Differing from *P. ornatus* in having the ribs more numerous and more equal in both valves. The shell is nearly white, with grey spots on the under valve, and in the upper valve, the tops of all the ribs, excepting three, are grey, the spaces between the white ribs being crossed by narrow lines of white. Brought by Mr. Cuming, from Guimaras, Philippines.

86. *P. SANGUINOLENTUS*. (pl. xiii. f. 59.) *Gmel.* p. 3322. No. 41.

*T.* ovali subtrigonâ, scabrâ, subæquivalvi, subæquilaterali; auriculis inæqualibus, noduloso-sulcatis, acutis, posticis minoribus; costis 9, crassis, valdè elevatis, subquadratis, noduloso-sulcatis, lateribus serratis. Interstitiis magnis, noduloso-sulcatis: cardine obliquè plicato. Colore albo, roseo-tincto, suprâ costas fasciis rubris, latis, distantibus, variegato. Long. 1. 60.; lat. 0. 50.; alt. 1. 75.; poll.

This species bears some resemblance to *P. Pallium*, but it is more triangular in form, and the ribs are fewer, much more deeply undercut, and more elevated; the angles of the ears are much more acute. RED SEA.

87. *P. PALLIUM*. (pl. xvii. f. 148—150. pl. xviii. f. 167—68.) *Lin.* Syst. Nat. p. 1145. *O. regia*, *Gmel.*

*T.* Subrotundatâ, compressâ, æquivalvi, subæquilaterali; auriculis inæqualibus, noduloso-sulcatis: costis 14 ad 16, tripartitis, elevatis, crassis, subquadratis, concentricè squamatis, squamis plerumque tripartitis, imbricatis, numerosis, tenuis; interstitiis squamoso-sulcatis; intus ad marginem dentatis. Colore albo, purpureo fasciatim maculato; intus albo, marginibus

aurantiacis; variat aurantiaco, albo-maculato, atque purpureo. Long. 3. 5.; lat. 0. 92.; alt. 3. 5.; poll.

This well-known species is remarkable for the three rows of thin, sharp, scales upon each rib. South Seas.

88. *P. SPINIFERUS*. (pl. xx. f. 229, 230.) *G. B. Sowerby, Senr. Zool. Proc.* 1835. 110. *P. pulcherrimus, Gray, Beechey's Appendix.*

"*T. subovatâ, depressiusculâ, subæquivalvi, æquilaterali, auriculis inæqualibus, sinistrâ majore; valvis radiatim costatis, costis utriusque valvæ novem, latis, squamuliferis, squamulis fimbriatis; valvæ alterius marginibus dorsali, antico, posticoque spiniferis.* Long. 0. 9. lat. 0. 25. alt. 0. 9."

A richly sculptured little species, from Lord Hood's Island.

89. *P. TRANQUEBARICUS*. (pl. xii. f. 12. 13.) *Gmel.* p. 3328.

*T. ovali-subtrigonâ, ventricosâ, æquivalvi, æquilaterali, crassâ: auriculis inæqualibus sulcatis; posticis mediocribus, rectis; anticis majoribus, acutis: costis 18, sublævibus, elevatis, subquadratis, lateribus minutissimè serratis: colore pallidissimè fulvo, maculis magnis fuscis irregulariter fasciatim variegato; vel aurantiaco, immaculato.* Long. 1. 35; lat. 0. 60.; alt. 1. 40.

Somewhat triangular, ventricose, equi- or æquivalve, equilateral, thick: with unequal ears, the anterior large; ribs 18, smooth on the tops, very finely striated at the sides. The usual colour is nearly white, with large, defined, brown patches. An orange variety is not uncommon. Tranquebar.

90. *P. SINGAPORINUS* (pl. xiii. f. 55. pl. xiv. f. 71.) *nob.*

*T. rotundato sub-trigonâ, sub-compressâ, æquivalvi, æquilaterali, sub-tenui; auriculis inæqualibus; anticis magnis; costis 24, elevatis, sub-quadratis, lævibus: colore albo pallidè roseo tincto radiis 4, latis, fusco lineatis; propè umbones griseo maculato.* Long. 1. 30.; lat. 0. 40.; alt. 1. 30.

Differing from the preceding in being more depressed, and rounded, and having a much greater number of less elevated ribs; the auricles, although unequal, are less disproportionate. Var. f. 55. Mr. Norris's collection; Var. f. 71, Mr. Cuming, Singapore.

91. *P. SENATORIUS* (pl. xvii. f. 151 and pl. xviii. f. 188 to 192.) *Gmel.* p. 3327. *ostræa porphyria? citrina? aculeata? Gmel. P. florens, Lam. (f. 188) P. aurantius, Lam.*

*P. ovali sub-trigonâ, sub-depressâ, æquivalvi, sub-lævi; latere postico paululùm expanso: auriculis inæqualibus; scabroso-sulcatis; posticis plerumque obtusis; anticis elongatis,*

ad basin emarginatis; costis 20 ad 24 sub-elevatis, lævibus vel minutè serratis, squamis annulatis, ad latera numerosis; colore vario. Long. 1. 85.; lat. 0. 70.; alt. 2.; poll.

Oval, rather triangular, rather depressed, equivalve; with the posterior side more expanded than the anterior; auricles very unequal, the anterior being generally much produced; ribs 20 to 24 slightly elevated, round on the tops and either smooth or very finely serrated, with annulated scales, which are generally obsolete towards the centre of the shell. The author having laid together some 50 specimens of this species, all of which differed from each other in some degree, found that although the extreme varieties, such as f. 151 were scarcely recognizable as belonging to the same species, the intermediate gradations were so minute as to render it impossible to divide them. Indies, Molluccas; var. f. 151. Red Sea.

92. *P. CRASSICOSTATUS*. (pl. xv. f. 111. pl. xvii. f. 152.) *nob.*

T. sub-rotundatâ, crassâ, sub-æquilaterali, sub-lævi; auriculis inæqualibus, costas squamiferas ferentibus: costis 24 crassis, elevatis, sub-quadratis, annulatis, lateralibus squamiferis. Interstitiis ferè lævibus, colore pallidè purpureo, vel aurantiaco, intus albo. Long. 4. 50.; lat. 1. 50.; alt. 4. 30.; poll.

The ribs of this species are much more square and elevated than those of *P. senatorius*, it is also a thicker and larger shell.

Locality unknown.

93. *P. ICELANDICUS*. (pl. xvii. f. 159, 160, 161.) *Chemn.* 7. to 65. f. 615. 616. Ostr. Cinnabavina. *Dillwyn.*

T. ovali, sub-compressâ; sub-æquivalvi, sub-æquilaterali, tenui, posticè paululùm expansâ; auriculis inæqualibus, scabroso-sulcatis; anticis magnis: costis numerosissimis, inæqualibus, minutè serratis; colore aurantiaco, concentricè fasciato; vel albo, vel purpureo concentricè et radiatim fasciato. Long. 3.; lat. 1. 20.; alt. 3. 25.; poll.

A well known oval, nearly equilateral, equivalve shell, with unequal auricles and numerous irregular, unequal, serrated, narrow ribs, which are grouped together in twos, threes and fours.

Northern Ocean.

94. *P. ASPERRIMUS*. (pl. xvii. f. 156, 157, 158.) *Lam.* Anim. s. vert. vi. p. 174.

*P.* rotundato sub-ovali, ventricosâ, tenui, æquivalvi, inæquilaterali, scabroso-sulcatâ posticè sub-expansâ: auriculis inæqualibus, scabroso-sulcatis: costis 25, angulatis, ad latera serratis, ad angulum erecto-squamosis: interstitiis nullis



colore fusco-rubescente, vel purpureo, vel aurantiaco. Long. 3. 10.; lat. 1. 10.; alt. 3. 20.; poll.

Rounded, oval, oblique, ventricose, thin, equivale; with unequal sulcated auricles; ribs 25, angular, serrated at the sides and having small, regular, erect, scales. The colour of the most common variety is reddish brown; while some specimens are orange red and others purple. Found in sponge.

New Holland.

95. *P. AUSTRALIS*. (pl. xix. f. 210, 220.) *nob.*

T. sub-ovali, ventricosâ, crassiusculâ, æquivalvi, inæquilaterali, posticè sub-expansâ: auriculis inæqualibus, scabroso-sulcatis; costis 23 crassis, sub-angulatis, trifariam divis, lateribus serratis, angulis squamatis; interstitiis planis. Long. 1. 45.; lat. 0. 55.; alt. 1. 50.; poll.

The shell is thicker and rounder than *P. asperrimus*, with fewer and less angular ribs and flat interstices. The ribs are composed of two rows of small, sharp points and a central ridge with scales.

Swan River.

96. *P. VARIUS*. (pl. xix. f. 214. 218.) *Linn. Syst. Nat. p. 1146.* Ostr. muricata, punctata, mustellina, violacea, tenuis, versicolor (f. 216), incarnata, media, ochroleuca, flammea, *Gmel.*

T. sub-ovali, tenui, sub-irregulari, valvâ sinistrâ paululûm majori, umbonibus angustis ventricosis: auriculis valdè inæqualibus; muricato-sulcatis: posticis parvis, obtusis; anticis magnis, acutis; dextræ valvæ anticâ longitudine alteram superante, margine valde inflexâ et squamatâ, ad basin valdè emarginatâ; costis 27 ad 30, sub-quadratis distantibus, squamas erectas, acutas, distanter ferentibus: interstitiis latioribus, colore vario. Long. 2.; lat. 0. 75.; alt. 2. 25.; poll.

Rather oval, lengthened, thin, not quite regular, with the under valve rather smaller than the upper, which is slightly ventricose near the umbones: the anterior auricles are much elongated, that of the upper valve considerably overlapping the other at the margin, with the sinus very large: ribs from 20 to 30, muricated by distant, erect, sharp scales, the interstices smooth, rather wider than the ribs. Some varieties are considerably smoother than others, with a greater number of ribs. The variations in colour are numerous. In the variegated varieties the white patches have an angulated character.

Great Britain and Mediterranean.

97. *P. SPLENDIDULUS* (pl. xx. f. 246.) *nob.*

T. ovali, sub-trigonâ, tenui, compressâ, ad latera angulatâ;

auriculis valdè inæqualibus, squamoso-sulcatis, complanatis; anticis latis, elongatis; sinu magno: costis 25, concinnis, subdistantibus, rotundato sub-quadratis, squamas, distantes, erectas, acutas ferentibus: colore rubro, maculis albis elongatis, ad auricula et ad latera fasciatim variegato. Long. 1. 20.; lat. 0. 35.; alt. 1. 35.; poll.

A more compressed, regular, and neat shell than *P. varius*. In the collection of Mr. Cuming. Singapore.

98. *P. SANGUINEUS* (pl. xix. f. 221-2) *Linn.* according to Gmelin.

*T. ovali*, sub-compressâ, regulari, æquivalvi, sub-æquilaterali; auriculis inæqualibus, muricato-sulcatis, marginibus elevatis; anticis elongatis; costis 25, crassis, sub-angulatis, squamas, numerosas, erectas, angulatas, parvas, ferentibus, margine dentatis; interstitiis angustis, planis; colore rubro, sanguineo, albo-variegato seu griseo, albo nigroque variegato; intus fulvo. Long. 1. 70.; lat. 0. 60.; alt. 1. 95.; poll.

The author cannot doubt the identity of the red variety of this species, with the figure quoted by Gmelin. The dark variety, which is variegated black and white, is new to our collectors, Mr. Cuming having brought a number of specimens from the Philippine Islands. The ribs are angular, and much thicker than in *P. varius*, and the interstices are narrower than the ribs.

99. *P. MINIACEUS* (pl. xx. f. 247.) *Lam.* Anim. sans vert. vol. vi. p. 67.

*T. ovali*, compressâ, subæquivalvi; auriculis inæqualibus, minutè scabroso-sulcatis: costis 30, rotundatis, annulatis, ad latera minutissimè serratis; interstitiis planis. Colore miniaceo, maculis albis, undulatis variegato, costis infra maculos minutè concentricè lineatis. Long. 0. 90; lat. 0. 32; alt. 1. 05; poll.

A small oval species, with unequal auricles, and 30 ribs which are minutely serrated at the sides, and annulated by obliterated scales. The colour is red, variegated by white undulating patches, beneath which the ribs are crossed by minute concentric lines.

Mr. Cuming's Cabinet.

100. *P. NIVEUS*. (pl. xix. f. 223-4.) ———?

*T. ovali*, sub-tenui, ventricosâ, valvâ sinistrâ paululum majori; auriculis inæqualibus, anticis majusculis: costis 40. lævibus, quadratis; spinas distantes, erectas, acutas ferentibus: interstitiis planis. Colore albo (nonnunquam occurrit rubro angulatim variegato?) Long. 1. 50; lat. 0. 60.; alt. 1. 70.; poll.

More regular, more oval and more ventricose than *P. varius*, with the anterior auricles smaller in proportion, and 40 muricated ribs instead of 25 or 30. It is a white British shell, the coloured variety (fig. 223) is more like *P. varius*, but has the same number of ribs as this species. Great Britain.

101. *P. PSEUDOLIMA*. (pl. xx. f. 235.) *nob.*

*T. rotundato-ovali*, sub-obliquâ, sub-æquivalvi, ventricosâ: auriculis inæqualibus, squamoso-sulcatis; anticis elongatis, acutis, valvæ dextræ, ad marginem spinosis; posticis parvis obtusis; costis 27, crassiusculis, bi-sulcatis, sub-rotundatis, series tres squamarum, acutarum ferentibus: interstitiis angustis, planis: colore aurantiaco, albo (precipue ad umbones) variegato. Long. 1. 15.; lat. 0. 50.; alt. 1. 20.; poll.

The ribs in this species are beautifully ornamented by three rows of close, sharp, erect, slightly curved scales. Brought by Mr. Cuming from Jacna, Bohol, Philippines.

#### DOUBTFUL SPECIES, NOT MENTIONED ABOVE.

*Linnaeus*. *Ostr. striatula*, minutæ, pellucens, flavicans.

*Gmelin*. *Ostr. elegans*, rosea, tenuis (Gault. t. 17. f. 3.) crenata, (Lister. t. 170. f. 7.) pusilla (Gault. t. 74. l. a. a.) triradiata (Müller. Zool. Dan. 2. t. 160. f. 12.—*P. dandicus*? Chemn.) Fuci (Müll. Zool. Dan. 2. t. 60. f. 3. to 5.) septemradiata, arata, crenulata (*Radula*?) innominata, subrufa, valentina, (Valent. Abb. t. 13. f. 2.) seminuda (Knorr. Vergn. 6. t. 19. f. 4.).

*Chemnitz*. *Pect. vitreum*. Conch. t. 67. f. 638. l. A. B. C. (The two latter are quite distinct.) aculeatus (Jeffreys).

*Born*. *Ostr. elongata*, t. 6. f. 2. perhaps a small *pes felis*.

*Poli*. *Ostr. nebulosa*, t. 2. f. 12. multistriata, t. 28. f. 14.

*Pennant*. *Ostr. lævis*, pl. 64. f. 3.

*Gray*. *Pect. vitreus*. App. Parry's Voyage (hyalinus?).

*Lamarck*. *Pect. lineolaris*, Anim. sans Vert. p. 166. Delasueur. pl. 15. f. 3. a. b. flabellatus, p. 172. dispar., p. 173. (obsoletus?) quadriradiatus, p. 173. hexactes, p. 178.

*Conrad*. *Pect. obliquatus*.

*Philippi*. *Ostr. testæ*.

*Payradeau*. *Pect. Dumasii*, (inflexus, clavata, Poli.)

## MONOGRAPH OF THE GENUS

## HINNITES.

*Char. Gen.* Molluscum accephalopodum monomyarium. Testâ ad hærente, bivalvi, inæquivalvi, irregulari, biauriculatâ: cardine recto, foveolâ trigonâ, centrali, cartilaginem recipiente; ligamento linearo, umbonibus contiguis.

*Obs.* The alledged difference between this genus and Pecten, consists in the disputed fact, that the shells of this genus are attached to submarine substances by the surface of the lower valve, and therefore, in giving the characters as above, I have used the word '*adhærente*' in opposition to the term '*libera*,' which is applied to the genus Pecten, because if the genus is to be adopted, that will be its distinction. At the same time, however, I am rather inclined to entertain the opinion expressed by G. B. Sowerby, Senr. (Zool. Journ.) that the Hinnites as well as the Pectines, are provided with a byssus; but that, in the case of the former, the shell growing in a confined situation, "becomes pressed close to, and takes the shape of the substances to which it adheres, and the extremely rare occurrence of an opportunity of observing its byssus may have given rise to the idea of its being adherent by its outer surface to those substances."

## DESCRIPTIONS.

1. *H. SINUOSUS* (pl. xx. f. 1, 2, 3.) Pecten pusio, distortus, *nonnull*.

T. oblongâ, tenui, confertim radiatim striatâ, striis scabris; auriculis inæqualibus, radiatim scabris: valvâ dextrâ prope marginem ventralem plerumque irregulariter depressâ, politâ.

Shell oblong, thin, closely striated, striæ radiating, scabrous; ears unequal, with scabrous radiated striæ; outside



of the lower valve, particularly the ventral margin, generally flattened and smooth. In its young state this shell is quite regular, but becomes increasingly irregular with age.

Great Britain.

2. *H. GIGANTEUS* (pl. xx. f. 3. 4. 5.) *Hinnita gigantea*, Gray in Ann. of Philos. Aug. 1826. *Lima gigantea*. Id. in loc. cit.

"T. oblongâ, extus pallidè brunneâ confertim radiato-sulcatâ, extus albâ, margine cardinali purpureâ; Long. 4.; alt. 5. poll."

"Irregularly oval, thick, radiately striated, with the ears small, narrow, hinge thick; colour pale brown, with reddish radiating streaks, inside white, hinge purple."

3. *H. CORALLINUS*.

"T. valdè irregulari, extus corallino-rubrâ, valvâ superiore radiatim costellâ, costellis muricato-subasperis: intus pallidé sub-fuscâ, marginibus basalibus sordidè purpureis; long. et alt. subæqualibus."

"Shell very irregular, outside of a fine coral red, upper valve with small radiating ribs, here and there muricated; inside pale subfuscous, basal margins dull purple; muscular impression having the appearance of a horny substance veined with the same as the other parts of the inside, its lower edges variegated with pale dull purple; inside composed of a distinctly faceted crystalline substance, with occasional black coriaceous spots near the edges. Lower valve paler in colour than the upper; very rough with the irregularities of the sand-stone rock upon which it has been placed."

Eastern Africa.

I am unable to give a figure of this shell, as the only known specimen was in the collection of the Rev. D. Goodall, which has been distributed in various quarters since the lamented death of that dignitary.

## EXPLANATION OF PLATES XII TO XX.

## PECTEN.

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| <p>FIG. 1, 2. <i>P. gibbus</i>, Sp. 22.<br/>         3, 4. <i>P. corallinoides</i>, 59.<br/>         5, 6. <i>P. unicolor</i>, 44.<br/>         7, 8. <i>P. solaris</i>, 28.<br/>         9, 10. <i>P. bifrons</i>, 26.<br/>         11. <i>P. superbus</i>, 52.<br/>         12, 13. <i>P. tranquebaricus</i>, 89.<br/>         14, 15. <i>P. clavatus</i>, 47.<br/>         16. <i>P. danicus</i>, 48.<br/>         17. <i>P. gibbus</i>, 22.<br/>         18, 19. <i>P. ventricosus</i>, 19.<br/>         20, 21. <i>P. lati-auritus</i>, 36.<br/>         22. <i>P. solaris</i>, 28.<br/>         23. <i>P. circularis</i>, 18.<br/>         24, 25. <i>P. pyxidatus</i>, 13.<br/>         26. <i>P. ventricosus</i>, 19.<br/>         27, 28. <i>P. tumidus</i>, 37.<br/>         30. <i>P. Rastellum</i>, 50.<br/>         31. <i>P. velutinus</i>, 55.<br/>         32, 33. <i>P. imbricatus</i>, 67.<br/>         34. <i>P. rubromaculatus</i>,<br/>             68.<br/>         35, 36. <i>P. sulcicostatus</i>, 6.<br/>         37. <i>P. sub-plicatus</i>, 57.<br/>         38, 39. <i>P. noduliferus</i>, 56.<br/>         40. <i>P. Greenlandicus</i>, 35.<br/>         41, 42, 43. <i>P. flagellatus</i>, 40.<br/>         44, 45. <i>P. corneus</i>, 80.<br/>         46. <i>P. distans</i>, 49.<br/>         47. <i>P. aculeatus</i>, 78.<br/>         48, 49, 50. <i>P. squamosus</i>, 73.<br/>         51, 52. <i>P. irregularis</i>, 75.<br/>         53, 54. <i>P. proteus</i>, 42.<br/>         55. <i>P. Singaporinus</i>, 90.<br/>         56. <i>P. serratus</i>, 74.<br/>         57, 58. <i>P. squamatus</i>, 76.</p> | <p>FIG. 59. <i>P. sanguinolentus</i>,<br/>             86.<br/>         60. <i>P. Patagonicus</i>, 27.<br/>         61. <i>P. lividus</i>, 72.<br/>         62, 63, 64, 65. <i>P. pusio</i>, 83.<br/>         66, 67. <i>P. hyalinus</i>, 39.<br/>         68. <i>P. Madreporarum</i>,<br/>             70.<br/>         69, 70. <i>P. albolineatus</i>, 85.<br/>         71. <i>P. Singaporinus</i>, 90.<br/>         72, 73. <i>P. sub-plicatus</i>, 57.<br/>         74, 75. <i>P. obsoletus</i>, 81.<br/>         76. <i>P. gibbus</i>, 22.<br/>         77, 78. <i>P. ornatus</i>, 84.<br/>         79. <i>P. obsoletus</i>, 81.<br/>         80. <i>P. ornatus</i>, 84.<br/>         81. <i>P. sub-plicatus</i>, 57.<br/>         82, 83, 84. <i>P. proteus</i>, 42.<br/>         85. <i>P. nucleus</i>, 17.<br/>         86, 87. <i>P. vitreus</i> ? 79.<br/>         88. <i>P. squamosus</i>, 73.<br/>         89. <i>P. lividus</i>, 72.<br/>         90. <i>P. Tegula</i>, 71.<br/>         91. <i>P. lividus</i>, 72.<br/>         92, 93. <i>P. squamosus</i>, 73.<br/>         94. <i>P. noduliferus</i>, 56.<br/>         95, 96. <i>P. Tigris</i>, 67.<br/>         97. <i>P. sub-nodosus</i>, 61.<br/>         98, 99, 100. <i>P. maximus</i>, 1.<br/>         101. <i>P. laqueatus</i>, 4.<br/>         102, 103, 104. <i>P. medius</i>, 5.<br/>         105, 106. <i>P. dentatus</i>, 11.<br/>         107, 108. <i>P. Jacobæus</i>, 3.<br/>         109, 110. <i>P. Japonicus</i>, 31.<br/>         111. <i>P. crassi-costatus</i>, 92.<br/>         112. <i>P. subnodosus</i>, 61.</p> |
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- FIG. 113. *P. purpuratus*, 21.  
 114. *P. magnificus*, 60.  
 115. *P. nodosus*, 62.  
 116, 117. *P. similis*, 2.  
 118, 119. *P. fuscus*, 8.  
 120, 121. *P. sinensis*, 9.  
 122. *P. magellanicus*, 33.  
 123, 124, 125. *P. purpuratus*, 21.  
 126. *P. obliteratus*, 29.  
 127, 128. *P. pleuronectes*, 30.  
 129-133. *P. ziczac*, 10.  
 134. *P. sinensis*, 9.  
 135, 136. *P. pleuronectes*, 30.  
 137, 138. *P. Laurentii*, 32.  
 139, 140. *P. irradians*, 20.  
 141-146. *P. opercularis*, 23.  
 147. *P. nodosus*, 62.  
 148-150. *P. Pallium*, 87.  
 151. *P. Senatorius*, 91.  
 152. *P. crassi-costatus*, 92.  
 153. *P. Jacobæus*, 3.  
 154, 155. *P. Radula*, 54.  
 156-158. *P. asperimus*, 94.  
 159-161. *P. Icelandicus*, 93.  
 162. *P. pes-felis*, 65.  
 163, 164. *P. Erythræensis*, 12.  
 165, 166. *P. subviridis*, 7.  
 167, 168. *P. Pallium*, 87.  
 169-176. *P. glaber*, 41.  
 177, 178. *P. medius*, 5.  
 179-181. *P. sulcatus*, 43.  
 182. *P. distans*, 49.  
 183-186. *P. exasperatus*, 25.  
 187. *P. Danicus*, 48.  
 188-192. *P. senatorius*, 91.  
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- FIG. 196, 197. *P. asper*, 14.  
 198, 199. *P. aspersus*, 16.  
 200-204. *P. flexuosus*, 45.  
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 208-210. *P. subrufus*, 24.  
 211, 212. *P. Pseudamusium*, 34.  
 213-218. *P. varius*, 96.  
 219-220. *P. Australis*, 95.  
 221, 222. *P. sanguineus*, 98.  
 223, 224. *P. niveus*, 100.  
 225. *P. muscosus*, 63.  
 226. *P. rugosus*, 64.  
 227, 228. *P. parvus*, 66.  
 229, 230. *P. spiniferus*, 88.  
 231, 232. *P. orbicularis*, 38.  
 233. *P. pictus*, 51.  
 234. *P. pes-felis*, 65.  
 235. *P. Pseudolima*, 101.  
 236. *P. hastatus*, 82.  
 237-239. *P. Plica*, 58.  
 240. *P. histrionicus*, 53.  
 241, 242. *P. Brueii*, 77.  
 243. *P. Pseudamusium*.  
       var. 34.  
 244. *P. corneus*, 80.  
 245. *P. corneus*, var. 80.  
 246. *P. splendidulus*, 97.  
 247. *P. miniaceus*, 99.  
 248. *P. undulatus*, 46.

#### HINNITES.

- 1, 2, 3, 4. *H. sinuosus*.  
 5, 6, 7. *H. giganteus*.

## MONOGRAPH OF THE GENUS

### L I M A .

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*Char. Gen.* Molluscum acephalopodum unimusculosum. Testâ bivalvi, interdum liberâ, interdum bysso adhærente, subæquivalvi, bi-auriculatâ, obliquè ovali, radiatim costatâ vel striatâ; margine ventrali anticè producto, cardine recto, edentulo; foveolâ trigonâ, in medio areæ centralis cartilaginem recipiente; impressione musculari sublaterali: colore albo; epidermide fusco, tenui.

The shells of this genus are generally equivalve, more or less obliquely oval, with small triangular, lateral auricles. The umbones are kept apart by a triangular disc in each valve. In the centre of each is a pit containing the cartilage, and the ligament is spread upon the surface at each side.

In all the species, there is an hiatus at both sides of the shell, although in several species it is very narrow. A byssus passing through the anterior hiatus, occasionally attaches the shell to sub-marine substances.

Judging from the shells alone, the *Limæ* would appear to be closely allied to the genus *Pecten*, from which they differ in having the umbones kept apart by the triangular disc, and in the ventral margins being produced on the anterior instead of the posterior side, so that the apex of the shell leans in the opposite direction. All the shells are white, or nearly so, but have a thin, transparent brown epidermis.

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### DESCRIPTIONS.

1. *L. SCABRA* (pl. xxi. f. 4, 5, 12.) *Born. Mus. Cæs.* p. 110, *Pecten aspera*, *Chemn.* 7. p. 352. pl. 68. f. 652. *Ostrea glacialis*, *Gmel.* p. p. 3302. *Lam. &c.*



*T. ovali*, crassâ, subcompressâ, ad latera posticè paululùm, anticè magis, hiantè; costis numerosis, angulatim interruptis, in medio angulatim confluentibus; auriculis striatis; anticis tumidis, subreflexis; epidermide fusco: cardine crasso, obsoletè plicato. Nonnunqua mtestâ irregulariter linguiformi occurrit.

Oval, thick, not very oblique, slightly gaping at the posterior margin, rather more so at the anterior. The surface is rendered scabrous by angularly notched ribs, meeting in the centre; the anterior auricles are tumid, with their edges slightly reflected.

2. *L. TENERA*. (pl. xxi. f. 2, 3, 10, 11, 13.) *Chemn.* 7. p. 352., t. 68. f. 652.. *Ostrea glacialis*, var. *Gmel.* 3332. *Lam. &c. Test. jun. L. annulata*, *Lam.* ?

*T. Limæ scabræ* simillimâ, sed costis minutissimis, squamis minutissimis erectis interruptis.

Var. *α*. t. ovali.

Var. *β*. t. subelongatâ. *Hab. Ins. Mindoro.*

Var. *γ*. t. obliquè subtrigonâ. *Hab. Batangas, Philippinarum; Singapore, &c.*

The difference between this and the preceding species consists in the comparative fineness of the notched ribs; when in good condition they produce small, erect, seed-like terminations to the notches, as represented in the magnified portion of fig. 13.

3. *L. BULLATA* (pl. xx. f. 32 and 33) *Born.* *Mus. Cæs.* p. 110. t. 6. f. 8. *Chemn.* 7. p. 348, t. 68. f. 649. b.

*T. elongato-ovali* crassâ, ventricosâ, sub-æquilaterali, ad latera vix hiantè; margine cardinali crasso, utrinque subtus auriculis uniplicato; auriculis validis subæqualibus, acutis; costis centralibus 20, validis, submoniliformibus, lateralibus minoribus subevanidis.

Elongated, thick, ventricose, nearly equilateral, scarcely gaping at the sides; hinge-margin thick, with a plication under the auricles, which are thick, sharp, and nearly equal. About 20 nodose, central ribs, and others less strongly raised at the sides. Found at Sorsogon by Mr. Cuming, in coarse sand, six fathoms.

4. *L. SUBAURICULATA*. (pl. xxii. f. 23.) *Mont.*

*T. minutâ Limæ bullatæ* simillimâ, sed costis minutissimis.

A minute British species, differing from *L. bullata* in the extreme fineness of the ribs.

5. *L. SQUAMOSA*. (pl. xxi. f. 1. 18.) *Lam. Anim. sans Vert.*

6. p. 156. *Ost. lima*, *Lin. Syst. Nat. Gmel. &c.*

T. crassâ, obliquâ, subcompressâ, utrinquè paululum hiante, latere antico angulariter complanato: auriculis posticis magnis, anticis minoribus: costis 20 ad 24, rotundatis, crassis imbricatis, areâ cardinali magnâ.

Thick, oblique, rather compressed, slightly gaping on both sides, anterior side angularly flattened: posterior auricles large, anterior comparatively small; ribs 20 to 24, thick, round, with sharp erect imbrications. The variety from the Red Sea, is more oblique, and has sharper and more numerous scales. Red Sea, Mediterranean.

6. L. MULTICOSTATA. (pl. xxii. f. 38) *nobis*.

T. Limæ squamosæ simillimâ, sed costis circiter 35, moniliformibus.

Resembling L. squamosa, but having the ribs much more numerous and less raised; 35 were counted in the specimen figured. Mediterranean?

7. L. PAUCICOSTATA (pl. xxi. f. 14. 17.) *nobis*.

T. Limæ squamosæ simillimâ, sed costis circiter 12, squamis magnis perelevatis.

In this species there are only 12 or 13 ribs, in other respects it resembles *Lima squamosa*,

8. L. EXCAVATA (pl. xxi. f. 8. 9.) *Chemn.* 7. p. 355. t. 68. f. 654. Ost. excavatâ Gmel. 3332.

T. ovali, tenui, ventricosâ, radiatim striatâ, utrinque paululum hiante; latere antico subtus auriculis areâ excavatâ angulatâ: auriculis, posticis magnis, anticis parvis.

Oval, thin, ventricose, radiated by fine distant striæ, slightly gaping on both sides, with a concave elongated depression in front; the anterior auricles are small, the posterior large. Norway.

9. L. FASCIATA (pl. xxi. f. 15. 16.) Ost. fasciata. *Linn.* Syst. Nat. p. 1147. Lima inflata, Lam. 6. p. 156. Chem. 7. t. 68. fig. 649. a, b.

T. tenui, ventricosâ, obliquè ovali, margine cardinali subtus auriculis uniplicato; areâ cardinali parvâ; latere postico latè hiante; antico paululum prope marginem ventralem hiante; auriculis acutis, anticis parvis, costis numerosis angularibus.

Although obscurely described, there can be little doubt of this being the true Lima fasciata of Linnæus. A specimen now exists in the Linnæan collection differing materially from the one subsequently introduced by Sir J. Smith, which we refer to the following species.

10. L. VENTRICOSA. (pl. xxi. f. 6. 7.) *nobis*. L. glacialis Poli. 28. f. 19. 21.

T. *Limæ fasciatæ* simillimâ, sed magis ventricosâ, costis distantibus, submoniliformibus.

Differing from *Lima fasciata* in being much more ventricose, and having the ribs more distant and beaded. The name given by Poli was previously applied to *L. scabra* by Gmelin. Mediterranean.

11. *L. ROTUNDATA.* (pl. xxi. f. 19.) *nobis.*

T. *Limæ fasciatæ* simillimâ, sed magis rectâ, et ventricosâ; costis distantibus, moniliformibus. *L. Ventricosæ* simili, sed formâ obliquè rotundatâ, minimè ovali.

Very closely resembling *Lima ventricosa*, but much shorter from the apex to the ventral margin; hinge much wider, and the ribs more coarse.

12. *L. ANGULATA* (pl. xxii. f. 39, 40.) *nobis.*

T. *tenui*, striatâ, ventricosâ, obliquè ovali, utrinque paululum hiante; posticè prope marginem ventralem angulatâ, margine cardinali angustatâ; auriculis parvis sub-equalibus.

Thin, striated, ventricose, slightly gaping on both sides, obliquely oval, with a posterior angle between the lateral and ventral margin, hinge narrow, auricles small, nearly equal. Found by Mr. Cuming at Panama and the Bay of Caracas, in sandy mud, 10 to 12 fathoms.

13. *L. LOSCOMBI.* (pl. xxii. f. 20, 21, 22.) *Leach.* Sowerby's Genera. *Lima*, f. 4. *L. bullata* of Turton.

T. *tenui*, ventricosâ, minutissimè striatâ, obliquè ovali, posticè prope marginem ventralem sub-angulatâ, utrinque vix hiante; auriculis parvis acutis; areâ cardinali parvâ.

Thin, ventricose, obliquely oval, with the posterior ventral margin slightly angular, scarcely any hiatus at the sides; auricles small, sharp; area of the hinge small. Britain.

14. *L. FRAGILIS.* (pl. xxii. f. 34, 35, 36, 37) *Chemn.* 7. t. 61. f. 650. *L. dehiscens*, *Conrad.* *L. linguatula* Lam.?

T. *tenui*, subcompressâ, obliquè elongatâ, ad latera lævi, in medio costis parvis distantibus, angulatis; lateribus validè hiantibus; hiatu postico costâ internâ marginato: auriculis parvis, posticis acutis, anticis obtusis; areâ cardinali angustâ.

Thin, rather flat, obliquely elongated, widely gaping on both sides; smooth at the sides, with the central ribs small, distant, and slightly angulated; the margin of the posterior hiatus is formed by an internal rib; auricles small, posterior acute, anterior obtuse; hinge area narrow. The variety f. 37. is from Tahiti, f. 34. and 35. are from the Philippine Islands. Found under stones at low water.

15. *L. ARCUATA.* (pl. xxii. f. 41, 42.) *nobis.*

**T.** *Limæ fragili* simillimâ, sed magis hiante ; margine ventrali magis expansâ, et sub-angulatâ.

Closely resembling *Lima fragilis*, but more gaping, and having the ventral margin expanded and slightly angular. Found at Lord Hood's Island, under coral rocks ; at Panama in sandy mud ; at Guayaquil Bay ; at Guacomayo, under stones, &c. by Mr. Cuming.

16. **L.** *APERTA*. (pl. xxii. f. 26, 27, 28, 29.) Ost. hians *Gmel.* 3333. *L. fragilis*, Mont. Test. Supp. p. 62. *L. tenera*, Turton. Zool. Journ. vol. 5. p. 362. pl. 13. f. 2.

**T.** tenui, sub-compressâ, obliquè ovali vel elongatâ, ad latera lævi, in medio minutè striatâ, anticè paululum, posticè latè, hiante ; hiatu postico costâ internâ validâ marginato ; auriculis posticis acutis, areâ cardinali parvâ.

More oval than *L. fragilis*, with the hinge end narrower in proportion, and the striæ much finer.

Britain.

17. **L.** *DENTATA*. (pl. xxii. f. 30. 31.) *nobis*.

**T.** obliquè elongatâ, tenui, sub-compressâ, anticè paululum, posticè latè, hiante ; hiatu postico costâ internâ marginato ; auriculis anticis parvis, obtusis, posticis acutis ; areâ cardinali magnâ : costis 18, distantibus, scabris, ad marginem ventralem dentatis.

Obliquely elongated, thin, rather compressed, the anterior side slightly, the posterior rather more widely gaping : a slight internal rib forms the margin of the posterior hiatus ; the posterior auricles are extremely sharp, with a notch underneath them ; the hinge area is deep ; ribs 18, distant, granulated, their terminations producing a dentated ventral margin. Collection of the Rev. F. J. Stainforth.

18. **L.** *CUMINGII*. (pl. xxii. f. 24, 25.) *nobis*. Zool. Proc.

**T.** tenui, parvâ, obliquè elongatâ, subinflatâ, subquinquelaterali ad margines ferè clausâ : posticè vix hiante ; margine ventrali sub-quadrato, cardine brevi : auriculis brevibus, sub-obtusis ; margine postico obtusè angulato ; costis 12 centralibus, sub-obsoletis, ad marginem dentatis ; umbonibus gibbosis.

We have only seen one specimen of this very distinct small shell, which differs from *L. fragilis* in being more ventricose, and having the margin closed all round, in the latter respect resembling *L. Loscombi*.

Found in sandy mud, at a depth of 10 fathoms, by Mr. Cuming at Bolinao, Isl. Luzon.



## EXPLANATION OF PLATES XXI AND XXII.

## L I M A.

- Fig. 1. Squamosa, Sp. 5. Mediterranean.  
 2. & 3. tenera, 2. Mindoro.  
     4. scabra, var. 1.  
     5. scabra, 1.  
     6. 7. ventricosa, 10.  
     8. 9. excavata, 8.  
 10. 11. tenera, 2.  
     12. scabra, 1.  
     13. tenera (portion magnified), 2.  
     14. paucicostata, 7.  
 15. 16. fasciata, 9.  
     17. paucicostata, 7.  
     18. squamosa, var. Red Sea, 5.  
     19. rotundata, 11.  
 20. 21. 22. Loscombi, 13.  
     23. subauriculata, 4.  
     24. 25. Cumingii (magnified), 18.  
 26. 27. 28. 29. aperta, 16.  
     30. 31. dentata, 17.  
     32. 33. bullata, 3.  
 34. 35. 36. 37. fragilis, 14.  
     38. multicostata, 6.  
     39. 40. angulata, 12.  
     41. 42. arcuata, 15.

# MONOGRAPH OF THE GENUS CYCLOSTOMA,

BY

G. B. SOWERBY, F.L.S. &c.

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Char. Gen. Molluscum terrestre gasteropodum, pulmoniferum, sexibus separatis. Testa turbinata, polymorpha, spiræ apice obtuso; anfractibus plerumque rotundatis: aperturâ plerumque ferè circulari, plus minusve posticè angulato; peritremate continuo, sæpe incrassato, reflexo. Operculum pauci-vel multi-spirali, calcareo vel corneo.

The diversity of form of the shells composing this genus is very remarkable, as will be seen by reference to our plates, some of the species being turreted, others planorbular, with every intermediate gradation; the apex of the spire is always obtuse; the volutions are almost constantly rounded, and the aperture is for the most part nearly if not quite circular, in some instances somewhat elliptical and more or less angular posteriorly; the peritreme is generally continuous, sometimes sinuated on the umbilical side, sometimes interrupted at its junction with the last volution, and sometimes notched posteriorly, frequently simple and sharp-edged, and in many instances reflected, or thickened and reflected, and variously fringed, sometimes double, having an inner simple and an external reflected edge.

The recent species of this Genus are now very numerous; in 1822 Lamarck had only described 26; in 1832 I had drawn up the characters of 108 species, and at the present time we have represented and described 175 species. There are however still several of Lamarck's species with which we are not acquainted, and of which we here mention the names, in hope to gain the information of which we are now destitute: these are his *C. ambigua*, *C. decussata*, *C. lineolata*, and *C. multilabris*, the number being now reduced to *four*, whereas in 1831 we gave a list of six species which we then did not know; we are indebted to M. De Lessert for our present knowledge of Lamarck's *C. mamillaris* and *C. Orbella*; the first of which is identical with that called *C. Volziana*, by Michaud,

It will perhaps be observed that De Lessert has published figures representing the above Lamarckian species; we must, however, note that the one he calls *ambigua*, represents Lamarck's *interrupta*; that the figures intended to represent *decussata* and *lineolata*, do not resemble any species we have ever seen, and that the figure of *C. multilabris* Lam. represents only an accidental deformity\*

We have particularly to acknowledge our obligations to the Rev. F. J. Stainforth, for the use of his very complete collection of species; to M. Alcide D'Orbigny, for the species collected by him in Cuba; and to Hugh Cuming, Esq., for the numerous species collected by himself among the Philippine Islands, as well as for much information relative to localities which he has kindly communicated to us.

We have arranged the species under two divisions, the first consisting of those which have the peritreme simple and not reflected, or very slightly so; and the second consisting of those in which it is more or less reflected, of the former there are 56 species, and of the latter 119 species. At the same time we have endeavoured, as far as we could judge of their affinities, to bring together those species which are most nearly related, so that the whole will be found to form natural groups; for example, the 168th to the 175th species, consisting of *C. antillarum*, *C. tortum*, *C. ventricosum*, *C. auriculatum*, *C. tortuosum*, *C. altum*, *C. pupiniforme*, and *C. minus* are evidently closely allied species; thus again the 158th to 162nd which are all European species bearing a general resemblance to each other, are all brought together: the same may be said of *C. involvulus* and of *C. læve* and their cognate species, as well as of nearly all the remainder; if we have not always fully succeeded in our attempt, it appears to have been because the affinities have not been very obvious.

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\*It seems needful to remind our general readers that *CYCLOSTOMA* is *neuter*, consequently the specific names should terminate in *um* or *e*, except when they are substantives, such as *Orbella*, *goniostoma*, *multilabrum*, *Ortyx*, *Cincinnus*, &c.

## DESCRIPTIONS.

§1 *Peritreme not reflected.*1 C. SUTURALE. pl. xxiii, f. 1. 2) *nob.*

T. orbiculato-depressâ, tenui, epidermide olivaceâ indutâ, anfractibus 3-4, rotundatis, transversim tenuissimè striatis, suturâ canaliculatâ; lineâ levatâ, filiformi propè suturam; aperturâ circulari, supernè emarginatione obsoletâ; peritremate tenui, margine acutiusculo; umbilico patulo; operculo concinnè spirali.

Shell of a depressed orbicular form, with a nearly flat spire, thin and white, covered with a thin olive-coloured epidermis; whorls 3 to 4, rounded, finely striated transversely, or in the direction of the axis; suture canaliculated, with an elevated, thread-like line next to it; aperture circular, slightly notched at the upper edge, peritreme thin, with a sharpish edge; umbilicus wide, spreading; operculum thickish, testaceous, with a very fine spiral line on the outer side.

Demerara, Mr. Bainbridge.

2. C. ASPERULUM (pl. xxiii, f. 3.) *nob.*

T. orbiculato-subdepressâ, tenui, translucidâ; anfractibus 4—5, rotundatis, rugulosis; suturâ distinctâ; aperturâ rotundatâ, supernè acuminatusculâ, peritremate tenui, margine acutiusculo; umbilico magno.

Shell of a somewhat depressed nearly orbicular form, thin, semitransparent, white; volutions 4—5, minutely rugulose all over; suture distinct, aperture nearly circular, but acuminated at the upper part where the peritreme is joined to the last volution, peritreme not thickened, margin sharp; umbilicus large. Several specimens of this species were in Mr. G. Humphrey's collection, labelled "*Pyxis, Jamaica.*" A young shell has a shelly operculum, and a thick green epidermis.

3. C. SEMISTRIATUM. (pl. xxiii, f. 6) *nob.*

T. orbiculato-subdepressâ, tenui, albidâ, fasciis pallidè fuscis interruptis; spirâ subprominulâ, apice obtusiusculo; anfractibus 4—5, rotundatis, supernè longitudinaliter striatis, infra lævibus; suturâ distinctâ; aperturâ circulari, supernè subacuminatâ; peritremate obsoletissimè subreflexo, tenui, margine acutiusculo; umbilico magno; operculo sulco externo spirali, anfractibus 4—5.

Shell of a somewhat depressed orbicular form; thin, whitish, with narrow pale brown interrupted bands; spire



rather prominent, its apex rather obtuse; volutions 4 to 5, rounded, spirally striated on the upper side, but smooth beneath; suture distinct; aperture circular, slightly acuminate at the upper part; peritreme thin, with a sharp edge, very slightly reflected; umbilicus large; operculum with a deep spiral groove outside, having from 4 to 5 volutions. From G. Humphrey's collection, labelled "*Poonah*."

4. *C. BRASILIENSE*, (pl. xxiii. f. 7.) *nov.*

*T.* orbiculato-subdepressâ, tenui, albâ, opacâ; anfractibus 4—5, rotundatis, transversim striatis; suturâ profundiusculâ; aperturâ circulari, peritremate tenui, acuto; umbilico magno; operculo testaceo, duplicato, extus tenuissimè spirali.

Shell of a rather depressed orbicular form, thin, white, opaque and chalky in appearance, volutions 4 to 5, transversely striated, striæ sharp and close set; suture deep; aperture circular; peritreme thin, sharp-edged; umbilicus large, operculum shelly, thick, double, smooth within, with a very fine spiral line on the outside. Collected in abundance in shady places near Rio Janeiro.

5. *C. GIGANTEUM*. (pl. xxiii. f. 8, 9.) Gray, Mus. Brit.

*T.* orbiculato-subdepressâ, crassiusculâ, albicante, epidermide corneâ fulvâ indutâ; apice rufescente; anfractibus 5—6, rotundatis, transversim striatis, striis supernè validioribus; suturâ distinctâ, striâ longitudinaliter impressâ propè suturam; aperturâ subeffusâ, supernè angulatâ, et in canalem inconspicuam subdecurrente, peritremate subincrassato; umbilico magno; operculo lineâ elevatâ spirali, interstitiis obliquè striatis.

Shell of a rather depressed orbicular form, thickish, white, with a red apex, and covered with a horny fulvous epidermis, which is sometimes paler above and darker on the lower part, and sometimes worn away in such a manner as to leave a dark fulvous band in the middle of the last volution; volutions 5—6, rounded, transversely striated, more strongly on the upper than on the lower half; suture distinct, with a longitudinally impressed line near to it; aperture rather spreading, angular above, where it forms an inconspicuous pointed canal; peritreme rather thickened, not very sharp-edged; umbilicus large; operculum with an elevated spiral line, of many volutions, with the interstices obliquely striated. Salango, W. Columbia; under dead leaves.

H. Cuming.

6. *C. INCA*. (pl. xxiv. f. 71, 72.) *D'Orb. Mag. de Zool.* 1835, p. 29.

*T. suborbiculari*, subdepressâ, tenuiusculâ, viridescenti-fuscâ, fasciâ saturatiori lineâque albicante medianis; spirâ brevissimâ obtusâ, anfractibus 4, lævibus, transversim striatis: suturâ distinctâ; aperturâ circulari, posticè subacuminatâ, peritremate tenui; operculo crassiusculo, anfractibus 7.

Shell nearly orbicular, rather depressed, and thin, of a greenish brown, with a darker band, and a whitish circumferential line; spire very short, obtuse, with four smooth transversely striated volutions; suture distinct; aperture circular, rather acuminate posteriorly, with a thin peritreme; operculum thickish.

From Yungas in Bolivia, D'Orbigny,

7. *C. ORBELLA*. (pl. xxiii. f. 6\*, 6\*\*) *Lam.* p. 148. De Lessert Recueil pl. 29, f. 13.

*T. suborbiculari*, subdiscoideâ, tenui, apice obtuso, paululùm levato, submamillari; anfractibus 4, supernè spiraliter striatis, striis prominentibus, infra levitè striatis; umbilico patulo; aperturâ circulari, peritremate tenui, subreflexo.

Shell nearly orbicular, almost discoid, thin and hyaline, with a slightly elevated, obtuse, submamillary apex; volutions 4, with prominent spiral striæ on the posterior part, but with very slight striæ anteriorly; umbilicus wide spreading; aperture circular with a thin and slightly reflected peritreme. In Mr. Cuming's Collection; locality unknown.

8. *C. STRAMINEUM*, (pl. xxix. f. 211, 212.) *Reeve*.

*T. suborbiculari*, subdepressâ, tenui, fulvescente, spirâ obtusâ, anfractibus 4, rotundatis, posticè prope suturam rugulosis, deinde striis elevatis obliquis ad umbilicum magnum decurrentibus; aperturâ subellipticâ, peritremate tenui, acuto, posticè paululùm angulato, supra ultimum anfractum subinterruptâ; operculo testaceo, anfractibus 7, obliquè striatis, suturâ profundâ.

Shell suborbicular, depressed, thin, pale yellow-brown; spire obtuse; volutions 4, rounded, rugulose at the posterior part near the suture, and then with elevated oblique lines, running into the umbilicus, which is very large; aperture slightly elliptical, peritreme thin, sharp edged, slightly angular, and in a small degree interrupted at the last volution; operculum testaceous, with 7 obliquely striated volutions. From Merida, in the Columbian Andes.

9. *C. CINGULATUM* (pl. xxix. f. 213, 214.) *nob.*

*T. suborbiculari*, subdepressâ, crassiusculâ, albicante, epidermide castaneo-fuscâ indutâ; spirâ brevi, obtusâ, anfractibus 4, rotundatis, rugulosis, cingulo ad peripheriam levatiusculo,

nigro ; aperturâ circulari, peritremate subincrassato, simplici, posticè subacuminato ; umbilico magno, intus transversim striato, extùs rugoso.

Shell suborbicular, rather depressed, whitish, covered with a chestnut brown epidermis : spire short, obtuse, with 4 rounded, rugulose volutions, the last showing a slightly elevated black band at the periphery ; aperture circular, peritreme slightly thickened, not reflected, a little acuminate posteriorly ; umbilicus large, transversely striated, rugose externally. From the mountains of New Granada, communicated by Mr. Powis.

10. *C. PUSILLUM*. (pl. xxiii. f. 5, 5\*) *nob.*

*T. orbiculari, subdiscoideâ, apice spiræ subprominulo ; anfractibus 4, rotundatis, lineis incrementi solùm striatis ; suturâ profundâ ; aperturâ circulari, peritremate tenuiusculo, subreflexo, posticè, propè anfractum ultimum subemarginato ; umbilico patulo ; operculo multispirali, extus concavo, margine canaliculato, intus nitido.*

Shell orbicular, nearly discoid ; apex of the spire rather prominent, volutions 4, rounded, marked only with fine striæ of growth ; suture deep ; aperture circular, peritreme rather thin, slightly reflected, and with a single very slight notch at the posterior part next to the last volution ; umbilicus wide ; operculum multispiral, concave externally, bordered with a channel and shining inside. Found at the roots of shrubs and trees at Calaumay, Isle of Luçon, and in the Isle of Negros, in earth under decayed leaves ; by Mr. Cuming.

11. *C. RUFESCENS*. (pl. xxiv. f. 36, 37.) *nob.*

*T. suborbiculari, rufescente, spirâ brevi, anfractibus 4 rotundatis, spiraliter costellatis et striatis, costellis crenulatis ; suturâ profundâ ; aperturâ circulari, peritremate tenui ; umbilico magno.*

Shell nearly orbicular, generally of a reddish colour, with a short spire consisting of 4 rounded, spirally ridged and striated volutions ; the ridges crenulated ; suture deep ; aperture circular, with a thin sharp peritreme ; umbilicus large. From Martinique, communicated by L. T. Powis Esq.

12. *C. PLEBEIUM* (pl. xxv. f. 40.) *nob.*

*T. subglobosâ, tenui, obscurâ, subfuscâ, spirâ breviusculâ, anfractibus 4, rotundatis, rapidè crescentibus ; apice obtusiusculo ; suturâ distinctâ ; aperturâ magnâ, circulari, peritremate tenui ; umbilico parvulo ; operculo multispirali, extus albicante, maculo centrali depresso, margine canaliculato, intus nitido.*

Shell nearly globose, thin, with a dull reddish brown surface, spire rather short, with 4 rounded, rapidly increasing volutions, apex rather obtuse; suture distinct; aperture large, circular, with a thin peritreme; umbilicus small; operculum multispiral, whitish externally with a depressed central spot, inside shining, with a channeled border. Found under dead leaves, near Calaumay, Luçon, H. Cuming.

13. *C. STENOSTOMA* (pl. xxxi. f. 261.) *nob.*

*T. suborbiculari*, depressâ, crassâ, lævi, castaneâ, albido-maculosâ; spirâ ferè planâ, anfractibus 4, subrotundatis; aperturâ ferè circulari, posticè subangulatâ, paululùm coarctatâ, peritremate subincrassato, umbilico maximo; operculo corneo, anfractibus sex.

Shell suborbicular, depressed, thick, smooth, chestnut coloured with whitish specks; spire nearly flat, volutions 4, somewhat rounded; aperture nearly circular, angular posteriorly, slightly contracted; peritreme a little thickened; umbilicus very large; operculum horny, with six volutions. From Arabia, communicated by Mr. Powis.

14. *C. CORRUGATUM* (pl. xxiii. f. 10, 11.) *nob.*

*T. orbiculato-subdepressâ*, crassiusculâ, albidâ, apice rufescente, epidermide tenui fuscâ indutâ; spirâ subprominulâ, acuminatusculâ; anfractibus 5, rotundatis, transversim striatis et corrugatis; suturâ distinctâ; aperturâ circulari, subeffusâ, supernè angulatâ, et in canalem inconspicuam desinente; peritremate tenuiusculo, margine acutiusculo, latere umbilicali incrassato; umbilico magno, margine crenulato, intùs transversim striato; operculo testaceo, extùs laminâ elevatâ convolutâ, intùs corneo, polito.

Shell of a rather depressed orbicular form, thickish, and of a dirty white colour, with a reddish apex, and covered with a thin fuscous epidermis, spire rather prominent and slightly acuminate, volutions 5, rounded, transversely striated and corrugated; suture distinct, but not deeply marked; aperture circular, rather spreading, angular, and forming an inconspicuous canal at the upper part, where it is joined to the last volution; peritreme thin, its outer margin sharpish, its umbilical edge thickened; umbilicus large, transversely striated within, its edge crenulated; operculum shelly, with a raised convoluted lamina on the outer side, shining and horny in appearance within. Although this species has been long well known it does not appear to have been described or figured by any author. It has been taken for the *C. rugosa*



of Lam. from which it is, however, very distinct. Its operculum is remarkably neat. Jamaica.

15. JAMAICENSE. (pl. xxiii. f. 12, 13.) *Gray in Wood's Supp. to Ind. Test. t. 6, f. 3.* TURBO JAMAICENSIS, *Chemn.*

T. orbiculato-subconicâ, crassiusculâ, plerumque pallidâ, epidermide fuscâ, indutâ, anfractibus 4—5, rotundatis, transversim tenuissimè striatis, supernè corrugatis, propè suturam elevatiusculis; suturâ distinctâ; aperturâ circulari, subeffusâ, supernè angulatâ, et in canalem brevissimam, inconspicuam, desinente; peritremate subincrassato, margine externo acutiusculo, interno incrassato, obtuso; umbilico magno, margine carinato, intus transversim striato; carinâ umbilicali extus corrugatâ; operculo testaceo, extus laminâ elevatâ, convolutâ, obtusâ, intus corneo.

Shell of a rather conical orbicular form, thickish, generally of a pale colour, covered with a dark brown epidermis; volutions 4—5, rounded, very finely transversely striated, corrugated on the upper part, and rather raised next to the suture; suture distinct, but not deeply marked; aperture circular, somewhat spreading, angular at the upper part, where it forms a very short and inconspicuous canal, peritreme slightly thickened, its outer margin rather sharp, its umbilical edge thickened and blunt; umbilicus large, and transversely striated within, strongly keeled at the edge, corrugated outside of the keel; operculum shelly, with a raised, convoluted, obtusely-edged lamina outside, and appearing horny and shining within. Common in Jamaica: it is distinguished from *C. corrugatum* by the umbilicus being surrounded by a strongly marked keel, and by the lamina outside the operculum having its edge reflected.

16. *C. FILOSUM.* (pl. xxiii. f. 14.) *Beechey*, t. 38. f. 31.

T. orbiculato-subconicâ, crassiusculâ, pallidâ, anfractibus 5, rotundatis, longitudinaliter striatis et carinatis, carinis duabis majoribus fusco-articulatis, inferiore suturali: suturâ minimè distinctâ; aperturâ circulari, peritremate subincrassato, supernè sinuato, et subangulato, in canalem brevissimam inconspicuam desinente, margine obtusiusculo; umbilico magno, margine carinis duabus, intus profundè striato.

Shell of a somewhat conical orbicular form, its spire rather shorter than the aperture, thickish, of a pale colour, volutions 5, rounded, longitudinally striated and carinated, the two more prominent keels speckled with reddish brown, the lower one running along the suture, which is otherwise very indis-

tinged; aperture circular, peritreme rather thickened, sinuated at the upper part, and rather angular, forming a very short inconspicuous canal, edge rather obtuse; umbilicus large, deeply grooved within, its edge with two prominent keels.

A very rare East Indian species.

17. *C. CLATHRATULA*. (pl. xxiii. f. 15. 16.) *Recluz*.  
Rev. Zool. 1843.

*T.* subglobosâ, crassiusculâ, spirâ subconoidali, apice obtuso; anfractibus 4—5, rotundatis, supernè spiraliter tenuiter striatis, et decussatis, infra lævibus; aperturâ subovali, supernè angulatâ, peritremate crassiusculo, supra umbilicum mediocre, paululùm extenso.

Shell nearly globose, thickish, light yellow brown, with an obtusely pointed, rather conoidal spire, volutions from 4—5, rounded, their upper part finely and spirally striated and the interstices of these striæ very finely striated obliquely, the lower part smooth; aperture rather oval, angular above, peritreme thickened, spreading over a very small part of the middling sized umbilicus.

From Yemen, Arabia.

18. *C. POLITUM*. (pl. xxiii. f. 17.) *nob.*

*T.* subglobosâ, crassiusculâ, subpellucidâ, politâ, spirâ subconoidali, apice obtuso; anfractibus 4, rotundatis, pallidis, brunneo-variegatis; suturâ distinctâ; aperturâ circulari, peritremate subincrassato, intùs subconstricto, supernè subangulato; umbilico parvo.

Shell nearly globose, thickish, subpellucid, shining, spire rather conoidal, with an obtuse, and generally black, tip; volutions 4, distinctly rounded, of a pale colour, more or less varied with brown, and having a brown band at the lower part; suture distinctly marked; aperture circular, peritreme thickened, angular at the upper edge, with a slight internal constriction near the edge, which is obtuse; umbilicus small.

19. *C. LUCIDUM*. (pl. xxiii. f. 20. 21.) *Lowe*. Trans. of Cambr. Phil. Soc. 1831. t. 6. f. 40.

*T.* subglobosâ, olivaceâ, spirâ conoideâ, subacuminatâ, anfractibus 4—5, rotundatis, lævibus; aperturâ subporrectâ, circulari, coarctatâ, margine obtuso; umbilico nullo; operculo crasso, intùs margine elevato.

Shell subglobose, olivaceous; spire conoidal, rather acuminate; volutions from four to five, rounded, smooth; aperture circular, contracted, edge obtuse; umbilicus none; operculum thick, with the inner edge raised. Madeira.

20. *C. LISTERI*. (pl. xxiii. f. 22. 23.) *Gray*. Mus. Brit.

*T.* subglobosâ, crassiusculâ, spirâ conoideâ, subacuminatâ, anfractibus 4—5, rotundatis, lævibus, nonnunquam supernè spiraliter obsoletè striatis; suturâ distinctâ; aperturâ circulari, peritremate subincrassato, supernè angulato, latere umbilicali calloso, callo umbilicum partim obtegente; umbilico parvo, spiraliter striato.

Shell nearly globose, thickish, spire conoidal, rather acuminate; volutions 4 — 5 rounded, smooth, sometimes obsoletely striated longitudinally, more distinctly so in young specimens; suture distinct; aperture circular; peritreme somewhat thickened, angular at the upper part, spreading on the umbilical side into a callus which partly covers the small spirally striated umbilicus. Mauritius.

21. *C. LIGATUM*. (pl. xxiii, f. 24.) *Lam.* Anim. sans Vert.

*T.* tenui, subglobosâ, spirâ conoideâ, subacuminatâ; anfractibus 5—6, rotundatis, obsoletissimè longitudinaliter et transversim obliquè striatis; suturâ distinctâ; aperturâ circulari, supernè subangulatâ; peritremate tenui, paululum subreflexo, latere umbilicali patente; umbilico parvo, lævissimo.

Shell thin, subglobose, with a conoidal, rather acuminate spire, consisting of 5 — 6 rounded volutions which are very obsoletely striated longitudinally on the upper part, these striæ being obliquely crossed by other transverse striæ which are equally faint, the suture is strongly marked; the aperture is circular, rather angular at the upper part; peritreme thin, very slightly reflected, spreading so as partly to cover the umbilicus on the inner side; umbilicus small, and together with the lower part of the volutions quite smooth. The apex is of a dark colour.

22. *C. AFFINE*. (pl. xxiii. f. 25. 26) *nob.* Turbo ligatus, Wood.

*T.* tenui, subglobosâ, spirâ conoideâ, subacuminatâ; apice obtuso; anfractibus 4—5, rotundatis, lævigatis; aperturâ circulari, supernè subangulatâ; peritremate tenui, latere umbilicali paululum reflexo; umbilico parvo spiralitèr sulcato; operculo lævigato, nucleo sublaterali.

Shell thin, nearly globose, with a conoidal, rather acuminate spire, whose apex is obtuse; volutions 4 — 5, rounded, smooth; aperture circular, slightly angular at the upper part; peritreme thin, very slightly reflected on the umbilical side; umbilicus small, spirally grooved; operculum smooth, with a somewhat lateral nucleus.

23. *C. FULVESCENS* (pl. xxv. f. 79, 80.) *nob.*

*T.* globoso-conicâ, tenuiusculâ, pallidè brunneâ, spirâ sub-acuminatâ, anfractibus 5, rotundatis, confertim spiralitèr striatis, ultimo maximo; aperturâ fere circulari, peritremate tenui; saturâ distinctâ; umbilico parvo.

Shell globosely conical, rather thin; of a pale brownish colour, with transverse bands of darker brown; spire rather acuminate; volutions 5, rounded, covered with close set spiral striæ; the last volution very large; aperture nearly circular, with a thin peritreme; suture distinct; umbilicus small.

From Madagascar, sent to Mr. Cuming by M. Petit.

24. *C. ORTYX*. (pl. xxiii. f. 27. 28.) *D'Orb. Mag. de Conch. t. 117. f. 2.*

*T.* tenui, subglobosâ, pallidâ, fusco-variegatâ, spirâ conoideâ, subacuminatâ, apice acutiusculo; anfractibus 4—5, ventricosis, spiraliter sulcatis et carinatis; aperturâ circulari sub-effusâ, peritremate tenui, subreflexo, margine levitèr sinuato, umbilico mediocri, spiraliter sulcato; operculi anfractibus obliquè striatis.

*Var. sulcis carinisque anfractuum obsoletioribus.*

Shell thin, nearly globose, with a conoidal, somewhat acuminate, rather sharp pointed, spire; volutions 4 to 5, ventricose, longitudinally grooved and carinated; aperture circular, rather effuse, with a thin subreflected peritreme whose edge is slightly sinuated; umbilicus of moderate dimensions, spirally grooved; operculum spiral, its volutions obliquely stiated.

From the Seychelles.

25. *C. UNDULATUM*. (pl. xxiii. f. 29. 30.) *nob.*

*T.* globoso-conoideâ, crassiusculâ, spirâ acuminatiusculâ, apice obtuso; anfractibus 5, ventricosis, spiraliter sulcatis, supernè propè suturam distinctam undulatis; aperturâ ferè circulari, supernè obtusissimè emarginatâ, peritremate tenui, latere umbilicali in callum incrassatum, supra umbilicum parvum extenso; umbilico spiraliter sulcato.

Shell globosely conoidal, thickish, spire rather acuminate with a blunt point; volutions five, ventricose, spirally grooved, and undulated on the upper edge near the suture, which is well marked; aperture nearly circular, very slightly emarginated near the upper part where it joins the last volution; peritreme thin, except on the side next to the umbilicus, where it is thickened into a callus nearly covering the small umbilicus, which is spirally grooved.

Bengal.

26. *C. SPURCUM*. (pl. xxiv. f. 75, 76.) *nob.*



*T. suborbiculari*, rufescente-fuscâ; spirâ prominulâ, anfractibus quatuor rotundatis, albicante-subvariegatis, spiraliter striatis, et subcarinatis; suturâ distinctâ, subcrenulatâ; apertura circulari, peritremate albo, tenui, subreflexo; umbilico parvo; operculo crassiusculo, anfractibus quinque.

Shell nearly orbicular, of a reddish brown colour; spire rather prominent, consisting of four rounded, spirally striated, and somewhat carinated volutions, usually somewhat variegated with whitish; suture distinct, slightly crenulated; aperture circular, with a white, thin, slightly reflected peritreme; umbilicus small; operculum thickish, with five volutions. In Mr. Cumings collection, locality unknown.

27. *C. SULCATUM*. (pl. xxiii. f. 31.) *Oliv.* Voyage dans le Levant. *C. costulatum* *nonnull*.

*T. tenui*, globoso-conoideâ, unicolore, spirâ acuminatiusculâ, apice obtuso, papillari; anfractibus 4-5, ventricosis, spiraliter sulcatis, creberrimè decussatis; aperturâ circulari, supernè subangulatâ, peritremate tenui, continuo; umbilico parvo, spiraliter sulcato; operculo pallido, maculo centrali saturatiori, anfractibus obliquè striatis.

Shell thin, nearly globular, with a somewhat conoidal, subacuminated, blunt pointed papillary spire; volutions from four to five, ventricose, spirally grooved, the grooves crossed by very fine striæ; aperture circular, with a slight angle at the upper part, peritreme thin, continuous, blunt edged; umbilicus small, spirally grooved; colour violaceous or orange brown, darker at the apex, and becoming gradually paler as it increases in size, without any bands; operculum pale coloured, with a darker central spot, its volutions numerous and obliquely striated. This is not the *C. sulcata* of Lamarck; it was discovered by Olivier and has since been found at Mehadia, in the Bannat, by M. Partsch.

28. *C. GLAUCUM. nob.* (pl. xxiv. f. 39.)

*T. subgloboso-conicâ*, crassiusculâ, rufescente, glauco-tinctâ; spirâ mediocri, apicè obtuso; anfractibus 5, subventricosis, lævibus, tenerrimè spiraliter striatis, striis posticis majusculis; suturâ subobtectâ, anticè subcrenulatâ, lineâ impressâ anticâ; aperturâ ferè circulari, posticè subangulatâ; peritremate subincrassato; umbilico parvo, angusto.

Shell subglobosely conical, thickish, of a reddish colour with a glaucous tint; spire of moderate length, with an obtuse apex; volutions five, rather ventricose, smooth and very finely transversely striated, the posterior striæ being the larger; su-

ture partly covered by the edge of the next volution, which is slightly crenulated, with an impressed anterior line; aperture nearly circular, rather angulated posteriorly; peritreme somewhat thickened; umbilicus small, narrow. Brought by M. Hoffman, locality unknown.

29. *C. PARVUM*. (pl. xxxi. f. 254, 255.)

*T. suborbiculari*, depresso-conoideâ, tenui, lævigatâ, fulvescente, radiatim fusco-strigatâ, spirâ brevi, submucronatâ, anfractibus 5 rotundatis, tenerrimè spiraliter striatis, obsoletissimè 4 ad 5 carinatis; aperturâ circulari, peritremate simplici, posticè subemarginato, umbilico magno; operculo corneo, crasso.

Shell suborbicular, depressedly conoidal, thin, smoothish, yellowish brown, with dark brown radiating stripes; spire short, somewhat mucronated, with five rounded, very finely spirally striated volutions, the last volution large, with 4 or 5 exceedingly obsolete keels: aperture circular, peritreme simple, slightly emarginated posteriorly; umbilicus large; operculum horny, thick. From the Island of Zebu, Mr. Cuming.

30. *C. ELEGANS*. (pl. xxiii. f. 32, 33.) *Auctm.*

*T. oblongo-subacuminatâ*, spirâ obtusâ, submamillari; anfractibus 4-5, ventricosis, spiraliter sulcatis, creberrimè decussatis; suturâ distinctâ, rotundato-subexcavatâ; aperturâ subrotundatâ, supernè subangulatâ; peritremate tenui, continuo; umbilico minimo; operculo pallido, maculâ subcentrali fuscâ, anfractibus paucis, obliquè striatis.

Shell of a rather acuminate oblong shape, with an obtuse, rather mamillary apex; volutions 4-5, ventricose, spirally grooved and very finely decussated; suture distinct, somewhat rounded; aperture nearly round, somewhat angular at the upper part; peritreme thin, continuous, blunt edged; umbilicus very small; operculum pale coloured, with a nearly central dark spot, its whorls few, obliquely striated. Europe.

31. *C. MARMOREUM*. (pl. xxiii. f. 34, 35.) Brown in Edin. Journ. of Nat. and Geogr. Science, vol. 1.

*T. oblongo-subacuminatâ*, apice obtuso, submamillari; anfractibus quatuor, ventricosis, marmoratis, nitidis; suturâ distinctâ; aperturâ subrotundâ, supernè subangulatâ; peritremate tenui, continuo; umbilico minimo.

Shell of a rather acuminate oblong shape, with an obtuse rather mamillary apex; volutions 4, ventricose, of a dark colour, marbled with white, quite smooth and shining; suture distinct; aperture nearly round, rather angular at the upper

part; peritreme thin, continuous; umbilicus very small.

Near Edinburgh, Mr. Gerarde.

32. *C. CINCINNUS. nob.* (pl. xxiv. f. 77, 78.)

T. suborbiculari, subturritâ, tenui, albidâ, interdum fusco-unifasciatâ; anfractibus 5, rotundatis, posticè spiralitèr sulcatis, sulcis subdistantibus, anticè spiraliter, striatis; suturâ distinctâ; aperturâ circulari, peritremate tenui, versûs umbilicum parvum subreflexo; apicè obtusiusculo.

Shell suborbicular, somewhat turreted, thin, whitish, sometimes with a single brown band; volutions five, rounded, posteriorly spirally sulcated, the grooves rather distant, anteriorly spirally striated; suture distinct; aperture circular, with a thin peritreme, which is slightly reflected towards the small umbilicus; apex rather blunt. In Mr. Cuming's collection; locality unknown.

33. *C. MINUTISSIMUM.* (pl. xxx. f. 251) Zool. Proc. Feb. 1832. p. 32.

T. globoso-pyramidali, fulvâ, apice nigro; anfractibus 3 rotundatis, suturâ profundâ; aperturâ circulari, peritremate acuto; umbilico nullo; operculo corneo.

This very minute species, which is not more than one-twentieth of an inch in length, is not quite so wide as it is long, but of a nearly globose form, though slightly pyramidal; it is of a dull brownish yellow colour, with a black apex; volutions three, rounded, with a deeply impressed suture; aperture circular, its peritreme sharp: it has an horny operculum, but no umbilicus. Found by Mr. Cuming under dead leaves on Pitcairn's Island.

34. *C. PUPIFORME.* (pl. xxiv. f. 43, 44.) *nob.*

T. subacuminato-cylindræâ, apice truncato; anfractibus 4, turgidis, creberrimè decussatis; suturâ distinctâ; aperturâ subrotundâ, supernè angulatâ; peristomate subreflexo; umbilico minimo.

Shell nearly cylindrical, very slightly acuminate, its apex truncated or decollated; spire consisting of 4 turgid, very finely decussated volutions; suture strongly marked; aperture nearly round, angular at the upper part, peritreme very slightly reflected; umbilicus very small.

35. *C. MAMILLARE.* (pl. xxiv. f. 45.) *Lam. C. Volzianum, Michelin Coq. d'Algers.*

T. subacuminato-cylindræâ, lævi, albicante, fusco-punctulatâ, apice obtusiusculo; anfractibus 5—6, subventricosis, supernè obsoletissimè decussatis; aperturâ subovali,

supernè acuminatiusculâ; peritremate tenui, subreflexo; umbilico minimo.

Shell somewhat cylindrical, rather acuminate, with an obtuse apex, whitish with fuscous dots; volutions from 5 to 6, rather ventricose, smooth, very obsoletely decussated at their upper edges; aperture rather oval, rather acuminate at the upper part; peritreme thin, slightly reflected; umbilicus very small.

Algiers.

36. *C. AURANTIACUM*. (pl. xxiv. 46, 47.) *nob.* *C. aurantium*, Gray, Wood. Supp. t. 6. f. 23.

*T.* acuminato-pyramidalis, apice decollato, pallidè fulvâ aurantiaco vel fusco-variegatâ; anfractibus 5, ventricosis, lævigatis, nonnunquàm decussatis, striis spiralibus eminentioribus; suturâ distinctâ; aperturâ subovali, supernè acuminatiusculâ, intùs aurantiacâ; peritremate patente, albicante; umbilico minimo.

Shell of an acuminate pyramidal form, truncated at the tip, of a pale fulvous colour, varied with orange or brown; some specimens are of an uniform colour, and others have several very narrow orange or brown irregular bands; volutions 5, ventricose, smooth, sometimes more or less strongly decussated, the spiral striæ being the most prominent; suture distinct; aperture rather oval, slightly acuminate at the upper part, of an orange colour within; peritreme spreading, whitish, umbilicus very small. The apex of this and several others is deciduous, so that when full grown they are always truncated at the tip. I have never seen the young shell of this species.

37. *C. SIMILE*. (pl. xxiv. f. 48, 49.) *Gray*, M. S. ined.

*T.* subacuminato-pyramidalis, apice decollato, albicante, interruptim fusco lineatâ; anfractibus 4, ventricosis, plerumque decussatis, nonnunquàm lævigatis, striis spiralibus eminentioribus; suturâ distinctâ; aperturâ subovali, fauce croceâ, peritremate patente, albicante; umbilico minimo.

Shell of a somewhat acuminate pyramidal form, truncated at the tip; whitish or pale ferruginous, sometimes a little variegated, and sometimes with interrupted brown lines; volutions 4, ventricose, generally strongly marked with decussating striæ, the spiral striæ being the stronger, sometimes nearly smooth; suture distinct; aperture nearly oval, inside saffron-coloured; peritreme spreading, whitish, umbilicus very small.

Islands of the Mediterranean



38. *C. TENELLUM*. (pl. xxiv. f. 50.) *nob.*

*T.* subacuminato-pyramidali, spirâ aperturam superante, apice obtuso; anfractibus 4—5 ventricosis, spiraliter striatis, interstitiis striarum tenuissimè decussatis; suturâ distinctâ, rotundato-impressâ; aperturâ ferè circulari, supernè subangulatâ, disjunctâ; peritremate paululùm patente; umbilico parvo.

Shell of an oblong rather acuminate pyramidal form, obtuse and rounded, not truncated at the apex; suture rather longer than the aperture; volutions from 4P 5, ventricose, spirally striated, the interstices of the striæ very finely decussated; suture distinct, the volutions being as it were excavated near to it give it the appearance of being grooved out; aperture nearly circular, rather angular at the upper part, separated from the last volution; peritreme very slightly expanded; umbilicus small. A small fillet passes from the upper edge of the aperture to the last volution.

39. *C. PYGMÆUM*. (pl. xxx. f. 253.) *nob.*

*T.* subglobosâ, tenuiusculâ, fusciscente, spirâ acuminatusculâ, apice obtuso; anfractibus 4½, rotundatis, spiraliter sulcatis; suturâ distinctâ; aperturâ subcirculari, posticè paululùm acuminatâ; peritremate tenui, propè umbilicum parvum subreflexo.

Shell subglobose, rather thin, fuscous, with a slightly acuminate, spire, obtuse at the apex, and consisting of 4 rounded spirally grooved volutions; suture distinct; aperture nearly circular, slightly acuminate posteriorly; peritreme thin, slightly reflected near the small umbilicus. Brought from New Ireland by R. B. Hinds, Esq., R. N.

40. *C. SICULUM*. (pl. xxiv. f. 51, 52.) *nob.* *C. sulcatum*, Drap. and Philippi.

*T.* subacuminato-pyramidali, spirâ aperturam superante, apice obtuso, anfractibus 5, ventricosis, lævigatis, spiraliter obsoletiusculè striatis; aperturâ ferè circulari, supernè subangulatâ, disjunctâ; peritremate paululùm patente; umbilico parvo; operculo spirali, anfractibus rapidè majoribus, obliquè striatis.

Shell of a somewhat acuminate pyramidal form, obtuse and rounded, not truncated at the apex; spire rather longer than the aperture; volutions five, ventricose, nearly smooth, and obsoletely spirally striated; aperture nearly circular, rather angular at the upper part, and slightly separated from the last volution; peritreme spreading a very little; um-

bilicus small, its volutions increasing rapidly, obliquely striated. A very common Sicilian species, also found in Provence.

41. *C. MELITENSE*. (pl. xxiv. f. 53, 54.) *nob.*

*T.* subcylindraceo-pyramidali, apice obtuso, spirâ aperturam ferè duplo superante; anfractibus 5, ventricosis, spiraliter sulcatis, sulcis alternis obsoletiusculis; aperturâ ferè circulari, supernè subangulatâ, disjunctâ; sinistrali peritrematis margine paululùm expanso; umbilico minimo; operculo spirali, anfractibus rapidè majoribus, obliquè striatis.

Shell of a somewhat cylindrical pyramidal form, with an obtuse, but not truncated apex, spire nearly double the length of the aperture; volutions five, ventricose, spirally grooved, the alternate grooves nearly obsolete; aperture nearly circular, rather angular at the upper part, and separated from the last volutions; peritreme white, its sinistral margin somewhat spreading; umbilicus very small; operculum spiral, its volutions rapidly increasing, obliquely striated.

Malta.

42. *C. FERRUGINEUM*. (pl. xxiv. f. 55 to 57.) *Lam.*

*T.* oblongo-pyramidali, apice obtuso, spirâ aperturam duplo superante; anfractibus 5—6, rotundatis, spiraliter sulcatis; aperturâ ferè circulari, supernè subangulatâ; peritremate tenui, acutiusculo; umbilico minimo; operculo spirali, anfractibus rapidè majoribus, obliquè striatis.

Shell of an oblong pyramidal form, with an obtuse, but not truncated, apex, spire twice as long as the aperture; volutions from 5—6, rounded and spirally grooved; aperture nearly circular, slightly angulated at the upper part; peritreme thin, rather sharp edged; umbilicus very small; operculum spiral, with obliquely striated, and rapidly increasing, volutions.

Spain.

43. *C. DISSECTUM*. (pl. xxiv. f. 58, 59.) *nob.*

*T.* oblongâ, apice truncato, spirâ aperturam paululum superante, anfractibus 4, rotundatis, spiraliter sulcatis, et tenuissimè decussatim striatis; aperturâ ferè circulari, supernè subangulatâ; peritremate tenui, continuo, disjuncto, obtusè marginato; suturâ distinctâ, sulciformi; umbilico parvo.

Shell oblong, very slightly acuminate, truncated or decolled at the apex, spire somewhat longer than the aperture; volutions four, rounded, spirally grooved, with very fine decussating striæ; aperture nearly circular, somewhat angular

at the upper part; peritreme thin, continuous, separated, with an obtuse edge; suture distinct, having the appearance of a groove; umbilicus small.

44. *C. SEMILABRUM*. (pl. xxiv. f. 60.) *Lam.*

T. oblongâ, sub-cylindrâ, subacuminatâ, apice decollato, spirâ aperturam ferè duplo superante; anfractibus quatuor, rotundatis, tenuissimè decussatis, interruptim fusco-lineatis; aperturâ subovali, supernè angulatâ; peritremate tenui, extus subpatente; suturâ indistinctâ; umbilico minimo.

Shell oblong, nearly cylindrical, slightly acuminate, the apex decollated; spire nearly twice the length of the aperture; volutions 4, somewhat rounded, very finely decussated all over, with interrupted spiral brown lines; aperture nearly oval, angular at the upper part; peritreme thin, the outer edge somewhat spreading; suture distinct; umbilicus very small.

Cuba.

45. *C. RUFILABRUM*. (pl. xxiv. f. 61.) *Beck. M.S.*

T. oblongâ, cylindrâ, fulvescente, apice decollato; anfractibus 4—5, spiraliter sulcatis, sulcis decussato-crenulatis, lateribus subrotundatis; suturâ inconspicuâ; aperturâ ellipticâ; peritremate incrassato, subexpanso, nigricante.

Shell oblong, nearly cylindrical, yellowish brown, apex decollated; volutions from four to five, spirally grooved, the grooves crossed by decussating lines which give a crenulated character to the intermediate threads, sides of the volutions somewhat rounded; suture not very conspicuous; aperture elliptical, with a thickened, somewhat expanded, blackish peritreme.

From St. Croix, Dr. Beck.

46. *C. TRANSLUCIDUM*. (pl. xxiii. f. 4.)

T. subglobosâ, subpellucidâ, albâ, epidermide corneo indutâ; spirâ breviusculâ, obtusâ, anfractibus quatuor, rotundatis, propè suturam elevatiusculis, striatis, supernè rugulosis; aperturâ sub-circulari, supernè subacuminatâ, peritremate acuto; umbilico mediocri; operculo testaceo, tenuiusculo, anfractibus septem, striatis.

Shell nearly globose, rather pellucid, white, with a thin, horny, fulvous epidermis; spire short, obtuse, consisting of four rounded volutions, rather elevated near the sutures, striated and rugulose on the upper part; aperture nearly circular, acuminate posteriorly, with a sharp peritreme; umbilicus of middling dimension; operculum testaceous, thin, consisting of seven striated volutions.

47. *C. DISTINCTUM*. (pl. xxiv. f. 38.) *nob.* Bay of Montija, West Columbia; H. Cuming.

*T. orbiculari*, depressâ, ferè planorbulâ, tenui, albâ; spirâ depressâ, anfractibus 4, distinctis, rotundatis, spirally sulcatis; aperturâ circulari, peritremate tenuissimo, acuto.

Shell orbicular, depressed, nearly flat, thin, white, with a depressed spire, consisting of four volutions, not quite contiguous to each other, rounded and spirally grooved; aperture circular, with a very thin sharp-edged peritreme.

48. *C. CORNU-VENATORIUM*. Gmel. (pl. xxiv. f. 41, 42.)

*T. orbiculato-depressâ*, albicante; spirâ mucronatâ, nigrâ; anfractibus 4 ventricosi, supernè transversim striatis, infra lævibus, lineâ medianâ ferrugineâ; suturâ profundâ; aperturâ circulari, peritremate tenui, acuto; umbilico maximo.

Shell orbicular, depressed, whitish; spire mucronated, with a black apex; volutions 4, ventricose, transversely striated on the upper part, smooth beneath, with a brown spiral line in the middle; suture deep; aperture circular; peritreme thin, acute; umbilicus very large.

Obs. This species approaches most nearly in shape to *C. Planorbulum* Lam.; it may, however, be distinguished by its lip not being at all reflected.

49. *C. LÆVIGATUM*. (t. xxiv. f. 62, 63.) Webb et Berthelot, Ann. des Sc. Nat. Mars 1833. *C. Canariense* D'Orb.

*T. subrotundatâ*, albidâ, fulvo-fasciatâ, lævi, spirâ acuminatusculâ; anfractibus quatuor, rotundatis, obsoletissimè transversim striatis, marginibus supernè decurrentibus, suturâ subcrenulatâ; aperturâ circulari, supernè acuminatâ, peritremate tenui, minimè reflexo; umbilico parvo; operculo spirali anfractibus paucis, leviter obliquè striatis.

Shell nearly round, whitish, with brown bands, smooth; spire slightly acuminated; volutions 4, rounded, very obsoletely transversely striated, with the upper margin decurrent; the suture irregularly crenulated: aperture circular, acuminated at the upper part; peritreme thin, not at all reflected; umbilicus small; operculum spiral, its volutions few, slightly obliquely striated.

There are several varieties of this species, one of which has the whole of the volutions slightly grooved. This last is not the *C. sulcatum* of Draparnaud, nor is it very nearly related to the common *C. elegans*.  
Teneriffe.

50. *C. ELONGATUM*. (pl. xxiv. f. 64.)

*T. oblongo-subpyramidalis*, decollatâ, pallide ferrugineâ; anfractibus 4. spirally striatis, interstitiis decussatis; suturâ



simplici; aperturâ elliptică, supernè subacuminată; peritremate tenui, minimè reflexo; umbilico minimo.

Shell oblong, somewhat pyramidal, decollated, pale brown; volutions 4, spirally striated, the interstices of the striæ decussated; suture entire (not crenulated); aperture elliptical, rather acuminate at the upper part; peritreme thin, not reflected; umbilicus very small.

51. *C. SUCCINEUM*. (pl. xxiii. f. 18, 19.) Zool. Proc. Feb. 1832.

*T.* parvâ, orbiculato-pyramidali, lævi, succineâ; anfractibus quinque, rotundatis; suturâ distinctâ; aperturâ rotundatâ, peritremate tenui, acuto, margine basali interno angulato; umbilico parvo, margine carinato.

A small orbicular shell, having a rather pyramidal form, smooth and of a reddish amber colour; volutions five, rounded; with a distinct and strongly impressed suture; aperture rounded; having a prominent angle at the lower internal margin; peritreme thin, sharp-edged; umbilicus small, its margin having a strong spiral ridge. Opara, Mr. Cuming.

52. *C. FASCIATUM*. (pl. xxiv. f. 65.) *Lam.*

*T.* cylindraceo-turgidâ, apice decollato; anfractibus 6, lævibus, fasciâ spirali fuscâ centrali; suturâ crenulatâ; aperturâ ferè circulari.

Shell nearly cylindrical, somewhat swelled near the middle, with the apex deeply truncated; volutions six, with a fuscous spiral band on the two central ones; suture crenulated; aperture nearly circular. It seems a doubtful *Cyclostoma*.

53. *C. FLAVULUM*. (pl. xxiv. f. 66, 67.) *Lam.*

*T.* cylindraceo-attenuatâ, apice obtuso, paululùm decollato; anfractibus sex, planulatis, lævibus; suturâ distinctâ, integrâ; aperturâ ferè circulari, supernè subangulatâ; peritremate obtuso, extùs producto.

Shell nearly cylindrical, somewhat attenuated towards the apex, which is blunt and decollated; volutions six, smooth, nearly flat-sided; suture distinct, entire; aperture nearly circular, rather angular at the upper part; peritreme obtusely edged, its external lower part produced.

54. *C. CUMINGII*. (pl. xxiv. f. 68, 69.) *nob.*

*T.* orbiculari, subdepressâ, albicante, epidermide fuscâ; spirâ elevatiusculâ, carneâ; anfractibus 5—6, rotundatis, spiraliter sulcatis; suturâ subdecurrente; aperturâ ferè circulari, obliquâ, albâ, supernè subacuminatâ, peritremate simplici, subincrassato; umbilico maximo; operculo corneo tenui, spirali, anfractibus plurimis, margine fimbriato.

Syn. Zoological Proceedings, Feb. 1832.

Shell nearly orbicular, rather depressed, whitish, with an olive brown epidermis, which appears to be very deciduous and which is much thinner on the lower than on the upper parts of the shell, where its remains form a broad, dark band just below the suture; spire somewhat raised, reddish, obtuse, consisting of five or six rounded, spirally grooved volutions; suture rather decurrent, and indistinct; aperture nearly circular, oblique, white, rather acuminate at the posterior part, and with a slightly thickened simple peritreme; umbilicus very large; operculum horny, thin, hyaline, light brown, with numerous volutions and a fringed margin. Island of Tumaco, W. Col. Mr. Cuming.

55. *C. FLAVUM*. (pl. xxiv. f. 60.) Brod. Zool. Proc. March 1832.

*T. subglobosâ, crassiusculâ, flavâ, spirâ brevi, subpyramidalî, anfractibus 5, ventricosis, spiraliter sulcatis, suturâ distinctâ; aperturâ subcirculari, supernè acuminatâ, peritremate internè incrassato, margine labii externi acuto; umbilico mediocri; operculo corneo, tenui.*

Shell nearly globose, thickish, yellow; with a short, somewhat pyramidal spire, volutions five, ventricose, spirally grooved, with a distinct suture; aperture nearly circular, acuminate at the upper or posterior end, peritreme thickened internally and the margin of the outer lip sharp-edged: umbilicus of middling dimensions; operculum horny, thin.

Found by Mr. Cuming, buried in the earth, under the root of a palm tree on Chain Island, S.S. This species has the aspect of a marine shell and bears a close resemblance to *Littorina*.

56. *C. INCONSPICUUM*. (pl. xxiv. f. 73, 74.) *nob.*

*T. suborbiculari, depressiusculâ, albicante, lævi, subrugulosâ, spirâ depressâ, obtusâ, anfractibus quatuor subventricosis, subdeclivibus, suturâ distinctâ; aperturâ suborbiculari, supernè acuminatâ, peritremate tenui, acuto; umbilico magno.*

Shell nearly orbicular, rather depressed, whitish, smooth with slight rugulosities, spire depressed, obtuse; four rather ventricose, somewhat inclined volutions, with a distinct suture; aperture nearly orbicular, acuminate at the upper part, with a thin, sharp-edged peritreme, which is close pressed to the last volution just above the large umbilicus.

§ 2. *Peritreme more or less reflected.*

57. *C. BILABIATUM*. (pl. xxv. f. 81, 82.) *nob. Pterocyclos bilabiatum, Benson.*

*T. discoideâ, spirâ depressâ, ferè planâ, colore pallido, castaneo-undulatâ; anfractibus 5, rotundatis, gradatim majoribus, lævibus; suturâ distinctâ, profundiusculâ; aperturâ ferè circulari; peritremate duplici, interno simplici, supernè emarginato, externo extûs undulato, sinuoso, supernè in tuberculum fornicatum desinente; umbilico patulo, anfractibus distinctis; operculo circulari, spirali, intus concavo, extus convexo, lamelloso.*

Shell discoid, with a depressed, nearly flat spire, of a pale colour, undulated with chestnut; volutions five, rounded, increasing gradually in size, quite smooth; suture distinct, rather deep; aperture nearly circular, with a double peritreme; inner peritreme simple, notched at the upper part, outer one sinuous and undulated, running into a vaulted tubercle at the upper part; umbilicus large and spreading, volutions distinct within; operculum circular, spiral, concave within, convex and lamellar externally.

Brought from Salem, near Madras, by J. M. Heath, Esq.

58. *C. PLANORBULUM*. (pl. xxv. f. 83 to 86.) *Lam. Anim. sans. vert. vi. 2. p. 143.*

*T. discoideâ, spirâ depressâ, planâ, colore pallido, castaneo-variegatâ; anfractibus 5, rotundatis, gradatim majoribus, lævibus; suturâ distinctâ, profundiusculâ; aperturâ ferè circulari, peritremate incrassato, supernè et extûs reflexo, ultimum versus anfractum desinente, fornicato; umbilico patulo.*

Shell discoid, spire depressed, flat, colour pale, varied with chestnut; volutions five, rounded, increasing very gradually in size, smooth, with faintly marked transverse lines of growth; suture distinct, rather deep; aperture nearly circular, with a thickened peritreme, the upper and outer part of which is reflected, and forms a vaulted projection running upon the last volution; umbilicus wide, spreading, the volutions conspicuous within.

Several varieties were brought by Mr. Cuming from the Philippine Islands: it is also found in Bengal.

59. *C. SPIRACULUM*. (pl. xxxi. f. 270. 271. 272. var. f. 273.) *nob. Genus Spiraculum nonnull.*

*T. suborbiculari, planorbulâ, crassiusculâ, albicante, castaneo radiatim irregulariter strigatâ, epidermide fusciscente*

indutâ; anfractibus 5, rotundatis, nonnunquam lævibus, nonnunquam spiraliter striatis, striis subasperis; aperturâ circulari, peritremate duplici, interno angusto, subreflexo, posticè emarginato, externo crassiusculo, reflexo, posticè in canalem desinente; anfractu ultimo spiraculum tubulosum, vel fornicatum propè aperturam gerente; umbilico maximo, expanso; operculo multispirali, intùs concavo, extùs convexo, laminâ spirali conspicuâ munito.

Shell suborbicular, planorbular, thickish, whitish with irregular chestnut coloured radiating streaks, covered with a brown epidermis; volutions 5, rounded, sometimes smooth, sometimes with roughish spiral striæ; aperture circular, peritreme double, inner narrow slightly reflected, notched posteriorly, outer thickish, broader, reflected and forming a canal posteriorly; the last volution with a tubular or vaulted spiracle near the aperture and close to the suture; umbilicus very large and wide spreading; operculum of many volutions, concave within, convex externally, and furnished with a white prominent spiral lamina. From India, in Mr. Stainforth's collection; we have a smaller, pale coloured variety, also from India.

60. *C. DISCOIDEUM*. (pl. xxv. f. 87, 88.) *nob.*

*T.* discoideâ, spirâ depressâ, planâ, pallidâ, epidermide olivaceâ; anfractibus 4—5, rotundatis, gradatim majoribus, lævibus; suturâ distinctâ, profundiusculâ; aperturâ circulari, peritremate supernè et internè tenui, simplici, externè reflexo, duplici; umbilico patulo, anfractibus intùs conspicuis.

Shell discoid, with a depressed, nearly flat spire, of a pale colour, with an olivaceous epidermis, volutions from four to five, rounded, increasing very gradually in size, smooth; suture distinct, rather deep; aperture circular, with the upper and inner part of the peritreme thin and simple, the outer part double and reflected; umbilicus spreading, the volutions distinct within.

*Demerara.*

61. *C. LITHIDION*. (pl. xxxi. f. 262.) *nob.*

*T.* suborbiculari, subdepressâ, crassâ, albidâ, apice fusco; spirâ paululùm levatâ, anfractibus  $4\frac{1}{2}$ , rotundatis, spiraliter sulcatis, propè suturam inconspicuam subplanulatis, anticè lævioribus; aperturâ circulari, obliquè positâ, posticè subangulatâ, peritremate paululùm reflexo; umbilicum versus declivi; umbilico maximo, intus lævi.

Shell nearly orbicular, rather flat, thick, whitish, with a brown apex; spire slightly raised, of  $4\frac{1}{2}$  rounded, spirally



striated volutions, rather flattened towards the indistinct suture, nearly free from grooves in front; aperture circular, obliquely placed, slightly angular posteriorly, peritreme slightly reflected, slanted off toward the umbilicus, which is very large and smooth within. From Yemen, Arabia; communicated by Mr. Powis.

62. *C. VITTATUM*, (pl. xxv, f. 89. 90.) *nob.*

*T.* subdiscoideâ, spirâ elevatiusculâ; anfractibus quinque, rotundatis, albicantibus, spiraliter fusco-fasciatis, supernè spiraliter striatis; suturâ distinctâ; aperturâ magnâ, circulari, intus fulvâ, fusco-fasciatâ, peritremate albicante, reflexo; umbilico amplo, anfractibus intus conspicuis.

Shell subdiscoïd, with a rather elevated spire; volutions five, rounded, whitish, spirally banded with brown, and longitudinally striated on the upper part; suture distinct; aperture circular, yellowish, with brown bands within, peritreme whitish, reflected; umbilicus large, the volutions conspicuous within. Brought from Madagascar by Mr. Caldwell.

63. *C. EXIGUUM*. (pl. xxv. f. 92.) *nob.*

*T.* subdiscoideâ, spirâ elevatiusculâ; anfractibus quatuor, rotundatis, albis, lævibus; suturâ profundâ impressâ; aperturâ circulari, peritremate marginato; umbilico magno.

Shell subdiscoïd, with a rather elevated spire, and with four rounded white smooth volutions; suture deeply impressed; aperture circular, with a reflected bordered peritreme: umbilicus large.

64. *C. MEXICANUM*. (pl. xxv. f. 93.) *Menke.*

*T.* orbiculato-convexâ, albidâ, opacâ, spirâ submucronatâ, anfractibus 5, rotundatis, transversim striatis; suturâ profundiusculâ: aperturâ circulari, intus flavidâ: peritremate obtuso, reflexo, latere anfractûs ultimi emarginatione obtusâ; umbilico lato et profundo.

Shell orbiculato-convex, whitish, dull, with a slightly mucronated spire consisting of five volutions, which are rounded and transversely striated and separated by a rather deep suture: aperture circular, yellowish within: peritreme obtuse, reflected, with an obtuse notch in the side next to the last volution: umbilicus broad and deep.

Found near Papontla in Mexico, Schiede.

65. *C. MACULOSUM*. (pl. xxxi. f. 256, 257.) *nob.*

*T.* suborbiculari, depressâ, crassiusculâ, lævi, castaneâ, albido-maculosâ; spirâ paululum levatâ, apice nigricantè; anfractibus 4, rotundatis, obsoletè spiraliter striatis; aper-

turâ subcirculari, peritremate subincrassato, subreflexo, posticè acuminatusculo; umbilico maximo, spiraliter castaneo lineato.

Shell nearly orbicular, depressed, thickish, smooth, of a chestnut colour mottled with whitish; spire slightly elevated, with a blackish apex, volutions 4, rounded, obsoletely spirally striated; aperture nearly circular, with a slightly thickened and somewhat reflected peritreme, rather acuminate posteriorly. Umbilicus very large, spirally coloured with chestnut lines. In Mr. Cuming's collection.

66. *C. MUCRONATUM*. (pl. xxv. f. 91.) *nob.*

*T. suborbiculari, depressâ, pallescente fuscâ, tenui, spirâ brevi, mucronatâ; anfractibus quatuor, rapidè crescentibus, rotundatis, tenerrimè transversim striatis; suturâ validâ; aperturâ circulari; peritremate duplici, externo lato subreflexo; interno angusto, lineari; umbilico lato; operculo multispirali, suturâ anfractuum lamellosâ, margine canaliculato, intus nitido.*

Shell suborbicular, depressed, of a pale brown colour, thin, with a very short mucronated spire, volutions 4, rounded, increasing rapidly, very finely transversely striated; suture deep; aperture circular, with a double peritreme, external peritreme broad, reflected, internal narrow, linear; umbilicus broad, operculum multi-spiral, the suture of its volutions lamellose; its border channelled, and inside smooth and shining. Found by Mr. Cuming, under decayed leaves, at Calauang in Luçon.

67. *C. SUBSTRIATUM*. (pl. xxv. f. 95.) *nob.*

*T. suborbiculari, depressâ, crassiusculâ, læviusculâ, fuscescente; spirâ brevissimâ, submucronatâ; anfractibus quatuor, rotundatis, posticè transversim striatis, striis ex suturâ profundâ radiantibus, anticè lævibus; aperturâ circulari, peritremate subincrassato, subreflexo; umbilico lato, operculo multi-spirali, latere canaliculato, intus nitido.*

Shell nearly orbicular, depressed, thickish, and rather smooth; of a brownish colour; spire very short, slightly mucronated, volutions 4, rounded, posteriorly transversely striated, striæ radiating from the deep suture; smooth anteriorly; aperture circular, peritreme somewhat thickened and reflected; umbilicus broad; operculum multi-spiral, with a channelled border and shining inside.

Found in the earth, under decayed leaves, in the Island of Siquijor, by H. Cuming.

68. *C. DISTOMELLA*. (pl. xxv. f. 94.) *nob.*

*T.* suborbiculari, depressiusculâ, lævi, albicante, fasciâ fuscâ infra mediam anfractûs ultimi; spirâ subprominulâ, nigricante, anfractibus 5, rotundatis, lævigatis, suturâ profundè impressâ; aperturâ circulari, peritremate duplici, interno simplici, continuo, externo tenui, extûs sub-variciformi, supernè seu posticè interrupto.

This is a very remarkable species of a nearly orbicular, rather depressed shape, smooth, whitish or dull brown with a dark brown band below the centre of the last volution: spire rather prominent, blackish, consisting of five rounded smooth volutions, with a distinct, deeply impressed suture; aperture circular, with a double peritreme, the inner of which is simple and continuous, and the outer thin, somewhat inflated and variciform externally; and interrupted at the upper or posterior part close to the last volution.

69. *C. CARINIFERUM*. (pl. xxv. f. 98.) *nob.*

*T.* orbiculari, subdepressâ, fulvescente-fuscâ, cingulo saturatori; anfractibus 5 rotundatis, spiraliter striatis et cariniferis, carinis 8—10 acutis, superioribus majoribus; aperturâ magnâ, orbiculari, peritremate reflexo, posticè supra anfractum ultimum paululum extenso; umbilico maximo, spiraliter striato; suturâ distinctâ.

Shell orbicular, depressed, yellowish brown with a belt of a darker colour; volutions five, rounded, with numerous spiral striæ and from eight to ten sharp keels, of which the upper are the larger; aperture large, orbicular, with a reflected peritreme, which is slightly extended over the last volution at the upper or posterior part; of a dark brown colour within: umbilicus very large, spirally striated within; suture distinct.

70. *C. LUZONICUM*, (pl. xxvii. f. 136, 137.) *nob.* Zool. Proc. June, 1842.

*T.* suborbiculari, albidâ, fusco-variâ, spirâ depressiusculâ. obtusâ; anfractibus 4—5, rotundatis, concinnè spiraliter striatis, fasciâ albidâ infra-suturali fusco-articulatâ; suturâ profundâ; aperturâ circulari; peritremate crasso, reflexo; umbilico maximo.

Shell nearly orbicular, whitish, varied with brown, spire somewhat depressed, obtuse; volutions from 4 to 5, rounded, with close set spiral striæ, and a whitish band articulated with brown immediately below the suture, which is strongly marked and deeply placed; aperture circular; peritreme

thick, reflected; umbilicus very large. First brought from Luçon by J. K. Smith, Esq. Mr. Cuming has collected numerous varieties, generally under decayed leaves, in Masbate and Luçon, &c.

71. *C. CANALIFERUM*. (pl. xxvii. f. 140. 141. 142.) *nov.* Zool. Proc. June, 1842, p. 81. *C. Gironnieri*, Soul. in Rev. Zool. April, 1842?

*T. orbiculari*, subdepressâ, crassiusculâ, albicante, brunneo-marmoratâ; spirâ depressâ, obtusâ; anfractibus quatuor, rotundatis, spiraliter striatis et supernè cariniferis, propè suturam brunneo albidoque articulatis et cingulo centrali brunneo ornatis: suturâ canaliculatâ, margine canalis elevato; aperturâ circulari, peritremate incrassato, reflexo, versus umbilicum patulum lamelloso-patente; operculum corneum, anfractuum margine lamellari levatiusculo.

Shell orbicular, rather depressed, thickish, whitish, mottled with brown; spire depressed, obtuse; volutions 4, rounded, spirally striated and carinated posteriorly, articulated with brown and white close to the suture, and with a central brown band: suture canaliculated, margin of the canal elevated: aperture circular, peritreme thickened, reflected, spreading in a lamellar form and partly covering the wide internally spirally striated umbilicus; operculum horny, the edge of its volutions lamellar and raised. Islands of Luçon and Burias, H. Cuming.

72. *C. CUVIERIANUM*. (pl. xxx. f. 218. 219.) Petit. Rev. Zool.

*T. suborbiculari*, subdepressâ, tenuiusculâ, striatâ, bicarinatâ, fulvo-rufescente, spirâ subdepressâ, anfractibus 4, rapidè crescentibus, rotundatis, posticè, concinnè spiralitèr striatis, carinis duabus, validis, anticè striis gradatim majusculis ornatis; suturâ oblitâ; aperturâ magnâ, ferè circulari, posticè paululum acuminatâ, peritremate lato, foliaceo, reflexo, expanso; umbilico magno, spiraliter striato.

Shell suborbicular, somewhat depressed, rather thin, spirally striated, reddish brown; spire slightly depressed, with 4 volutions, increasing rapidly, rounded, and spirally striated posteriorly, with two prominent keels, and furnished in front with gradually increasing striæ; suture indistinct; aperture large, nearly circular, a little acuminate posteriorly and with a broad, foliaceous, reflected, spreading peritreme; umbilicus large, spirally striated. Lately received from Madagascar,

73. *C. OCLUS-CAPRI*. (pl. xxv. f. 96.) *Helix Oclus-Capri*, Wood. Ind. Test. t. 32, f. 7. *C. Volvulus*, Lam. vi. 2, p. 143. *C. Rafflesii*, Sow. Zool. Journ.



*T. orbiculari*, albicante, castaneo-variegatâ et fasciatâ; spirâ depressiusculâ, apice obtuso; anfractibus 4—5, ventricosis, supernè spiraliter striatis (striis distantibus, interstitiis obsoletè striatis) ultimo maximo, omnibus propè suturam depressis; aperturâ circulari, peritremate flavicante, simplici, incrassato, reflexo, supernè subangulato; umbilico magno et regione umbilicali albicantibus, spiraliter striatis.

Shell orbicular, nearly white, varied and banded with chestnut colour, spire rather depressed, with an obtuse apex: volutions from four to five, ventricose, spirally striated at the upper part, the striæ distant, the interstices obsoletely striated, the first volution obliquely striated, the last very large, all depressed near the suture: aperture circular, peritreme yellowish, simple, thickened, reflected, slightly angular at the upper part: the large umbilicus and the umbilical region whitish, spirally striated. This is the largest species I know: it varies, however, very much in size, from one inch and a half in width to two inches and a half: the largest specimen was brought from Sumatra by the late Sir T. Stamford Raffles. It is one of several which Lamarck has confounded under the name of *C. Volvulus*. Java.

74. *C. PETIVERIANUM*. (pl. xxv. f. 100, 101.) Gray in Wood's Supp. to Index Testac. t. 6. f. 2.

*T. subglobosâ*, spirâ depressiusculâ; anfractibus 5 ventricosis, brunneis, medianè fusco-fasciatis, supernè subangulatis, albido-articulatis; suturâ marginatâ; aperturâ circulari, intùs albâ, peritremate reflexo, brunneo, supernè in canalem decurrente; umbilico magno, margine angulato; operculo spirali, crasso, corneo.

Shell subglobose, with a somewhat depressed obtuse spire; volutions five, ventricose, of a dark brown colour, with a fuscous medial band, their upper edges slightly angular, varied with whitish; suture distinct, with a raised border; aperture circular, white within, its peritreme reflected, brown, and its upper edge produced in the form of a pointed canal running upon the latter volution; umbilicus large with an angular margin; operculum spiral, thick and horny.

75. *C. TURBO*. (pl. xxv. f. 102, 103) Trochus Turbo, Chemn. ix. p. 53. t. 122, f. 1059.

*T. subglobosâ*, spirâ conoidali, anfractibus 5, planulatis pallidis, brunneo-variegatis; suturâ inconspicuâ; aperturâ ferè circulari, latere columellari subangulato; columellâ rectiusculâ, sub-obliquâ; peritremate reflexo, rotundato,

posticè marginato, infra in angulum desinente; umbilico clauso, calloso; operculo corneo, tenui, spirali.

Shell somewhat globose, with a conoidal spire, and five volutions, whose surfaces are flattened, of a pale colour, varied with brown; suture inconspicuous; aperture nearly circular, its columellar side somewhat angular; columella nearly straight, rather oblique; peritreme reflected, rounded edged, bordered behind, and forming an angle at the lower part; umbilicus closed with a callous covering; operculum spiral, horny, thin. Sumatra.

76. *C. CITRINUM*, (pl. xxv. f. 104.) *nob.*

T. subglobosâ, spirâ conoidali, anfractibus 5, ventricosis, pallidè aurantiacis, supernè spiraliter striatis, infra lævigatis: suturâ distinctâ; aperturâ circulari, peritremate valdè reflexo, rotundato, albo; umbilico magno, spiraliter sulcato.

Shell subglobose, with a conoidal spire; volutions five, ventricose, pale orange coloured, spirally striated on their upper parts, and smooth below; suture distinct; aperture circular, peritreme very much reflected, rounded, white; umbilicus large, spirally grooved.

77. *C. CANDIDUM*. (pl. xxvi, f. 107.) *nob.*

T. subglobosâ, spirâ obtusâ; anfractibus 5, rotundatis, spiraliter sulcatis, candidis; aperturâ subcirculari, supernè acuminatâ: peritremate incrassato, supernè subsinuoso: infra externè crasso, reflexo; margine interno calloso, supra umbilicum magnum partim extenso.

Var. callo umbilicali minore, reflexo.

Shell nearly globular, with an obtuse spire, consisting of five rounded, spirally grooved, white volutions: aperture nearly circular, acuminate at the upper part: peritreme thickened, rather sinuous at the upper part, outer edge thick and reflected at the lower part, the inner edge callous, and partly extended over the large umbilicus. There is a variety in which the umbilical callus is much smaller and reflected. Sometimes the lower part of the upper volutions is of a rusty brown colour.

78. *C. NATICOIDE*. (pl. xxvi. f. 108. 109.) Reclus Rev. Zool. 1843. p. 3.

T. subglobosâ, crassâ, albicante, interdum pallidè fulvescente, lævigatâ, lineis levatiusculis striisque transversalibus irregulariter clathratâ; spirâ brevi; obtusâ, anfractibus quinis, rotundatis, posticè tenerrimè striatis, et concinnè decussatis; ultimo maximo ventricoso; suturâ distinctâ, tenui; aperturâ

subcirculari, posticè subacuminatâ, intus aurantiacâ; peristomate albo, crasso, subreflexo, latere umbilicali incrassato, lato, extenso, umbilicum majusculum plerumque claudente: operculo elliptico, posticè angulifero, anfractibus tribus, extus striatis, intus lævibus.

Shell subglobose, thick, whitish, sometimes light brownish yellow, smooth, irregularly clathrated by elevated lines and transverse striæ; spire short, obtuse, with 5 rounded volutions, which are very finely spirally striated posteriorly and delicately decussated, the last being very large and ventricose; suture distinct, but slender; aperture nearly circular, rather acuminate posteriorly, of an orange colour within and with a white, thick, very slightly reflected peritreme, which is thickened and expanded in the inner side, so as generally to cover the rather large umbilicus; operculum elliptical, acuminate posteriorly, of three volutions, slightly convex and striated externally, smooth and rather concave within.

From the Island of Socotra.

79. *C. ALBICANS*. (pl. xxvi. f. 110, 111, 112.) *nob.*

T. subglobosâ, spirâ obtusâ, anfractibus 5, rotundatis, supernè spiralitèr sulcatis, infra lævissimis, albicantibus; aperturâ subcirculari, supernè subacuminatâ; peritremate incrassato, supernè subsinuoso, infra externè crasso, reflexo; margine interno angulifero; umbilico magno.

Shell nearly globular, with an obtuse spire, consisting of five rounded volutions, spirally grooved on the upper part, very smooth below, and whitish; aperture nearly circular, rather acuminate above, peritreme thickened, somewhat sinuous above, the lower part of the outer edge thickened and reflected, inner edge with an angle on the side of the umbilicus, which is large, and smooth within.

80. *C. CALCAREUM*. (pl. xxvi. f. 113.) *nob.* *C. sulcata*, Lam.

T. globoso-conicâ, spirâ acuminatâ, albâ: anfractibus 5, ventricosis, spiralitèr sulcatis: suturâ distinctâ: aperturâ circulari, peritremate simplici, reflexo: umbilico mediocri, intus spiralitèr sulcato.

Shell of a globoso-conical form, with an acuminate spire, white, with five ventricose, spirally grooved volutions: suture distinct: aperture circular: peritreme simple, reflected: umbilicus middle-sized, spirally grooved within. There is no doubt of this being the *C. sulcata* of Lam. inasmuch as it accords perfectly with his description, but it must not be confounded with the *C. sulcatum* of Olivier. Lamarck speaks of it as a very rare species.

81. *C. UNIFASCIATUM*. (pl. xxvi. f. 105. 106.) *nob.*

*T.* subglobosâ, spirâ acuminatâ, decollatâ, anfractibus quatuor, rotundatis, lævigatis, obsoletè spiralitèr striatis, albicantibus, ultimo fasciâ basali fuscâ unicâ; suturâ distinctâ; aperturâ circulari, intûs aurantiacâ, peritremate albo, reflexo, supernè sinuato, propè umbilicum calloso; umbilico minori, spiralitèr sulcato.

Shell subglobose, with an acuminate but decollated spire, consisting of 4 rounded, smooth volutions, with faint spiral striæ; volutions whitish, the last with a single fuscous band near the base; suture distinct; aperture circular, orange coloured within, peritreme white, reflected, sinuated above, thickened on the side of the umbilicus, which is small and spirally grooved. Madegascar.

82. *C. INVOLVULUS*. (pl. xxvi. f. 114 to 116.) *nob.*  
*C. Volvulus*. Lam. Anim. sans vert. vi. Turbo Volvulus, Chemn. ix. f. 1066.

*T.* globoso-conicâ, pallidâ, brunneo-variegatâ et fasciatâ, spirâ depressiusculâ, obtusâ; anfractibus 5 rotundatis, supernè spiraliter sulcatis, infra lævibus; suturâ distinctâ; aperturâ circulari, supernè subangulatâ; peritremate simplici; reflexo, ætate subcontinuo, antiquato; umbilico mediocri, intûs lævi.

Shell of a globosely conical form, with a rather depressed obtuse spire, consisting of 5 rounded volutions, spirally grooved on the upper part, and smooth below; suture distinct; aperture circular, rather angular at the upper part; peritreme simple, reflected, becoming somewhat continuous and antiquated by age; umbilicus middle-sized, smooth within; colour pale, varied on the upper part, and banded on the lower, with chestnut. This is one of several species which are confounded by Lamarck under the name of *C. Volvulus*; it is common in India.

83. *C. CARINATUM*. (pl. xxvi. f. 117. 118.) Lam. Anim. sans vert. vi, 2. p. 143.

*T.* globoso-conoideâ, brunneâ, spirâ acuminatâ, plerumque decollatâ; anfractibus 4—5, ventricosis, spiraliter carinatis, carinis plurimis, confertiusculis; aperturâ circulari, supernè subacuminatâ, peritremate albo, incrassato, subreflexo, callo umbilicali conspicuo; umbilico parvo, margine carinâ supereminente, intûs carinato.

Shell globosely conical, of a brown colour, with an acuminate, generally decollated spire; volutions 4—5, with nume-



rous close set, spiral ridges; aperture circular, rather angular at the upper part; peritreme white, thickened, somewhat reflected, forming a distinct callosity, partly covering the umbilicus, which is small, with a prominent keel forming its edge and several ridges within. I have a variety with an orange coloured peritreme.

84. *C. UNICARINATUM*. (pl. xxvi. f. 119, 120. *Lam. Anim. sans vert.* vi. 2. p. 144. *Encycl. Meth.* t. 461. f. 1. a. b.

*T.* globoso-conicâ, pallidâ, spiraliter fusco-fasciatâ, spirâ acuminatâ; anfractibus 4—6, rotundatis, lævibus, medio ultimi carinâ albâ solitariâ; aperturâ circulari, supernè subangulatâ; peritremate albo, incrassato, revoluto; umbilico mediocri, spiraliter sulcato.

Shell globosely conical, of a pale colour, with dark brown spiral bands, spire acuminate; volutions from four to six, rounded, smooth, the last having a single white keel; aperture circular, slightly angular at the upper part; peritreme white, thickened, revolute; umbilicus of middling size, spirally grooved.

Madagascar.

85. *C. BICARINATUM*. (pl. xxvi. f. 121.) *nob.*

*T.* globoso-conicâ, subfuscâ, spirâ acuminatâ, decollatâ, anfractibus 4—6, rotundatis, spiraliter obsoletè striatis, carinis duabis albis, alterâ medianâ, alterâ posticâ; aperturâ circulari; peritremate fulvo, reflexo, patente, callum supra umbilicum mediocre, spiraliter sulcato, efformante.

Shell globosely conical, of a brownish colour, with an acuminate decollated spire; volutions from four to six, rounded, obsoletely spirally striated, with two white keels, the one central, the other above; aperture circular, peritreme fulvous, reflected, spreading, not revolute, forming a callosity over the middle-sized umbilicus, which is spirally striated within.

Distinguished from the last not only by its having two keels, but also by its peritreme being spreading and not revolute.

Madagascar.

86. *C. TRICARINATUM*. (pl. xxvi. f. 122.) *Lam. Anim. sans vert.* vi. 2. p. 144. *Chemn.* xi. f. 1103, 1104.

*T.* globoso-conicâ, pallidè fulvâ, spirâ acuminatiusculâ; anfractibus 4—6, ventricosis, marginibus superioribus, subundulatis, carinis duabis ad quatuor acutis; aperturâ circulari, peritremate reflexo, supernè acuminato; umbilico magno, intùs carinato, margine carinâ supereminente.

Shell globosely conical, of a pale fulvous colour, with a

rather acuminate, and generally decollated spire, volutions from four to six, ventricose, their upper margins rather undulated, with from two to four sharp keels; aperture circular; peritreme reflected, acuminate at the upper part; umbilicus large, carinated within, and its margin consisting of a prominent keel. India.

87. *C. RUGOSUM*. (pl. xxvi. f. 123.) *Lam. Anim. s. vert.* vi. 2. p. 145.

*T. globoso-conicâ, albidâ, spirâ brevi, depressiusculâ, apice acuminatusculo; anfractibus quinque, supernè exquisitè decussatim striatis, infra lævibus; aperturâ circulari; peritremate revoluta, latere umbilicali tenui, expanso; umbilico magno, intus lævi.*

Shell globosely conoidal, whitish, with a short, rather depressed spire, whose apex is rather acuminate; volutions five, with delicately decussated striæ on the upper part, and smooth on the lower; aperture circular, and peritreme revolute, its umbilical side thin and partly spread over the umbilicus, which is large and smooth within. Trinidad.

88. *C. OBSOLETUM*. (pl. xxvi. f. 124. 125.) *Lam. Anim. s. vert.* vi. 2. p. 144. *C. Madagascariense* Gray in Griff. Cuvier.

*T. globoso-conoidali, albâ, fusco-fasciatâ, spirâ subacuminatâ, anfractibus rotundatis, lævibus, ultimo ventricoso; aperturâ circulari; peritremate albo, reflexo, subrevoluta, supernè subacuminato; umbilico magno, spiraliter sulcato.*

Shell globosely conoidal, white with fuscous bands; spire rather acuminate; volutions rounded, smooth, the last ventricose; aperture circular; peritreme white, reflected, somewhat revolute, and acuminate at the upper part; umbilicus large, spirally grooved.

89. *C. VOLVULUS*. (pl. xxvi. f. 126) *Lam. Anim. s. vert.* vi. p. 145. *Encycl. Meth.* t. 461. f. 5. a. b. *Helix Volutus*, Müller, *Vermium*, p. 82, no. 280.

*T. globoso-conicâ, apice obtusiusculo; anfractibus quinque, rotundatis, pallidis, fusco-variegatis, lævibus; suturâ distinctâ, margine inferiore levato; aperturâ circulari, supernè subcanaliferâ, peritremate albo, incrassato, reflexo; umbilico mediocri, margine obtusè carinato, intus lævi; operculo corneo, tenui, spirali.*

Shell globosely conical, with a rather obtuse apex; volutions 5, rounded, pale coloured varied with dark brown, smooth, suture distinct, its lower edge prominent; aperture

circular, its upper part slightly canaliferous; peritreme white, thickened, reflected; umbilicus middle-sized, its margin obtusely keeled, smooth within; operculum horny, thin, spiral. Lamarck has confounded several species under the name of *C. Volvulus*, but this appears to be the one to which that name was first applied. Chemnitz has given two species under the name of *Turbo Volvulus*, but the present appears to be the only one to which no other name has been given. Found at Pulo-Condore according to M. S. in the Banksian Collection.

90. *C. PERDIX*. (pl. xxvii, f. 127. 128.) *nob.* Zool. Journ. iv.

*T.* suborbiculari, albidâ, fusco-variâ, spirâ subdepresso-conicâ, subacuminatâ; anfractibus 4—5, primis carinatis, ultimo carinâ obsoletâ, fasciâ suturali pallidâ, fusco-articulatâ; suturâ subobsoletâ; aperturâ circulari; peritremate expanso, subrevoluto; umbilico magno.

Shell nearly orbicular, whitish, varied with fuscous; spire rather depressed conical, rather acuminate with from 4—5 volutions, the first of which are keeled, and the last with the keel obsolete, and a pale band, articulated with fuscous immediately below the suture, which is rather indistinct; aperture circular; peritreme spreading, almost revolute; umbilicus large. A variety occurs with more ventricose and less strongly keeled volutions, a more elevated spire, and a white, thickened, revolute peritreme. Another variety has ventricose volutions, and an orange coloured peritreme. The young shells have an angular aperture,

91. *C. TUBA*. (pl. xxvii, f. 129. 130.) vide Zool. Proc: June, 1842, p. 83.

*T.* suborbiculari, depressiusculâ; tenui, lævi, albicante, rufescente-fusco variegatâ et nubeculatâ; spirâ brevi, subdepressâ, acuminatâ; anfractibus quinis, planiusculis, primis carinatis, ultimo maximo, rotundato; aperturâ maximâ, circulari, expansâ, albicante, peritremate albicante, tenui, lato, revoluto, supra anfractum ultimum interrupto; umbilico magno.

Shell suborbicular, rather depressed, thin, smooth, whitish, varied and clouded with reddish brown; spire short, rather flattened, acuminate at the apex; volutions 5, flattish, the posterior carinated, the last very large, and rounded; aperture very large, circular, expanded, whitish: peritreme whitish, thin, broad, revolute, interrupted over the last volution: umbilicus large.

Found under decayed leaves near Mount Ophir, in Malacca, H. Cuming.

92. *C. AQUILUM*. (pl. xxvii. f. 131.) *nob.*

*T.* suborbiculari, subdepressâ, tenuiusculâ, lævi, fulvescente fuscâ, nonnunquam cingulo pallescente mediano; spirâ brevi, acuminatusculâ, anfractibus quinque subplanulatis, primis paululùm carinatis, ultimo maximo, rotundato; aperturâ circulari, expansâ, albicante vel fulvescente, peritremate subincrassato, reflexo, supra anfractum ultimum interrupto, ad latere umbilicali subsinuato; umbilico magno.

Shell nearly orbicular, rather depressed and thinish, smooth, of a yellowish brown, sometimes with a paler circumferential band; spire short, rather acuminate, of 5 rather flattened volutions, the first of which are slightly carinated, the last very large and rounded; aperture circular, expanded, whitish or fulvous, peritreme slightly thickened and revolute, interrupted by the last volution and somewhat sinuated on the umbilical side; umbilicus large.

Found under decayed leaves in the Woods at Singapore, H. Cuming.

93. *C. VALIDUM*. (pl. xxvii. f. 132. 133.) *nob.*

*T.* orbiculari, crassiusculâ, pallidâ, brunneo-variegatâ, spirâ levatiusculâ, anfractibus quinque rotundatis spiraliter striatis et nonnunquam obtusè quatuor ad quinque carinatis; suturâ distinctâ; aperturâ circulari, peritremate incrassato, reflexo, umbilicum versus patente; umbilico mediocri; operculo corneo, tenuiusculo, margine anfractuum lamellari.

Shell orbicular, rather thick, of a pale colour varied with brown; spire rather elevated, of 5 rounded, spirally striated, sometimes obtusely 4 or 5 keeled volutions; suture distinct; aperture circular, with a thickened, reflected peritreme somewhat spread on the umbilical side, so as partly to cover it; umbilicus moderate; operculum horny, rather thin, the edge of its volutions lamellar.

Several varieties were found in Samar and Leyte, among the Philippine Islands, by Mr. Cuming, generally under decayed leaves.

94. *C. IRRORATUM*. (pl. xxvii. f. 134. 135.) *nob.*

*T.* subgloboso-conicâ, tenui, lævi, pallescente, fusco-irroratâ, plerumque cingulo mediano nigricante; spirâ elevatiusculâ, apice nigricante, obtuso; anfractibus quinque, ventricosi, primum subcarinatis, deinde rotundatis; suturâ tenui; aperturâ ferè circulari, posticè obsoletè subacuminatâ, anfractu ultimo tenuitè modificatâ, peritremate crassiusculo, rotundato-reflexo; umbilico mediocri.



Shell globosely conical, thin, smooth, of a pale colour variously speckled with brown, and generally having a blackish circumferential band; spire rather elevated, its apex dark coloured and obtuse; volutions 5, ventricose, at first slightly carinated, afterwards rounded; suture slender; aperture nearly circular, very slightly acuminate posteriorly, a little modified by the last volution; peritreme thickish, rounded, reflected; umbilicus moderate. China, common.

95. *C. ACUTIMARGINATUM*. (pl. xxvii. f. 138. 139.) *nob.*  
Zool. Proc.

*T.* suborbiculari, conicâ, tenui, lævi, subpellucidâ, badiâ, albido-marmoratâ; spirâ subacuminatâ, submamillari, anfractibus quatuor, rapidè crescentibus, supernè infraque rotundatis, margine carinato, acuto, propè suturam marginemque coloribus alternatis; aperturâ magnâ, orbiculari, peritremate reflexo, albo, incrassato, propè ultimum anfractum subinterrupto, supernè productiore, minimè reflexo; umbilico mediocri, profundo; operculo corneo, multispirali.

Shell nearly orbicular, conical, rather depressed, thin, smooth, somewhat pellucid, of a brownish colour, marbled with white; spire rather acuminate, slightly papillary; volutions 4, increasing rapidly, rounded both above and below, with a sharp keeled edge, with the colours alternating at the suture and at the margin; aperture large, with a reflected, white, and thickened peritreme rather interrupted by the last volution, and rather more produced above, but not reflected; umbilicus moderate, deep; operculum horny, multispiral.

On palm leaves at Catbalonga, I. of Samar, Mr. Cuming.

96. *C. SEMISULCATUM*. (pl. xxv. f. 99.) *nob.*

*T.* suborbiculari, depressiusculâ, tenuiusculâ, albicante, fasciâ angustâ medianâ fusco-nigricante, posticè plerumque brunneo-variegatâ; spirâ brevi, anfractibus quinque, posticè spiraliter sulcatis, sulcis distantibus, anticè læviter striatis, vel lævibus; suturâ distinctâ; aperturâ fere circulari, peritremate incrassato, subreflexo, posticè angulifero; umbilico lato, intus spiraliter striâtô; operculo corneo, crassiusculo, extus sublamelloso, intus lævi.

Shell nearly orbicular, flattish, rather thin, whitish, with a narrow dark brown circumferential band, and posteriorly generally variegated with brown; spire very short, volutions five, posteriorly spirally grooved with distant grooves, anteriorly smoothly striated or smooth; suture distinct; aperture nearly circular, peritreme thickened, somewhat reflected, with a posterior angle next to the last volution; umbilicus

broad, spirally striated within; operculum horny, thickish, externally somewhat lamellar, internally smooth and shining.

97. *C. DESMOULINSII*. (pl. xxv. f. 97.) Grat.

*T.* suborbiculari, depressiusculâ, tenuiusculâ, pallescente, strigis plurimis irregularibus fuscis spiraliter pictâ, spirâ brevi, anfractibus  $4\frac{1}{2}$ , rotundatis, leviter spiraliter striatis, rapidè crescentibus, ultimo maximo; suturâ tenui, angustâ; aperturâ ferè circulari, posticè subangulatâ; peritremate angusto, reflexo, prope ultimum anfractum subexpanso; umbilico magno.

Shell nearly orbicular, rather depressed, thinnish, of a pale colour, marked with numerous irregular brown spiral streaks, spire short, volutions  $4\frac{1}{2}$ , rounded, smooth, finely spirally striated, increasing rapidly, the last being much larger than the former; suture rather indistinct; aperture almost circular, rather angular posteriorly; peritreme narrow, reflected, a little spread over the last volution; umbilicus large.

In several collections, locality unknown.

98. *C. LINGUIFERUM*. (pl. xxix. f. 198.) nob.

*T.* suborbiculari, subconicâ, crassâ, pallescente, maculis saturatè brunneis angulatim variegatâ; spirâ subacuminatâ, submamillari, anfractibus quatuor, rotundatis, lævibus, spiraliter obsoletè striatis; aperturâ magnâ, orbiculari, peritremate incrassato, subreflexo, labio interno linguam latam efformante, umbilicum partim tegente.

Shell nearly orbicular and globosely conical, thick, of a pale colour, angularly varied with dark brown, spire somewhat acuminate, slightly mamillary, with four rounded, smooth, obsoletely spirally striated volutions; aperture large, orbicular, peritreme thickened, slightly reflected, columellar lip forming a broad tongue-shaped process, which partly covers the umbilicus.

Found under decayed leaves in the Island of Bohol, by Mr. Cuming.

99. *C. PHILIPPINARUM*. (pl. xxix. f. 205, 206, 207.) nob. Zool. Proc. 1842, p. 83.

*T.* globoso-conicâ, pallidâ, fusco-marmoratâ; spirâ subacuminatâ, anfractibus 5 subrotundatis, supernè longitudinaliter sulcatis, ultimo infra lævigato; aperturâ subrotundâ, peritremate obtuso, reflexo, supernè producto, latere umbilici subsinuato; umbilico parvo; operculo tenui, corneo, lævi.

Shell globosely conical, of a pale colour, marbled with

brown ; spire rather acuminate, consisting of five somewhat rounded volutions, longitudinally grooved on the upper part, the last volution smooth beneath ; aperture nearly round, peritreme obtuse, reflected, its upper edge produced, and the side towards the umbilicus rather sinuous : umbilicus small.

First brought by Mr. Smith from Luçon. Mr. Cuming has collected many varieties, generally under decayed leaves, though sometimes on leaves of trees and bushes, on several of the Philippine Islands.

100. *C. TIGRINUM*. (pl. xxix. f. 201, 202, 203, 204.) *nob.*

*T.* suborbiculari, subconicâ, crassiusculâ, læviusculâ, pallescente, strigis irregularibus, transversis, saturatè brunneis pictâ ; spirâ subacuminatâ, apice obtusiusculo, anfractibus quinque, raptim crescentibus, rotundatis, plerumque carinis tribus vel quatuor subobsoletis ; aperturâ magnâ, orbiculari, posticè subemarginatâ, peritremate reflexo, albo, incrassato, prope ultimum anfractum subinterrupto ; labio columellari subextenso, umbilicum mediocriter partim tegente ; suturâ distinctâ ; operculo tenui, corneo, multispirali, marginibus anfractuuum lamellosis.

Shell suborbicular, subconical, thickish, rather smooth, of a light brown, with irregular transverse stripes of dark brown : spire slightly acuminate, rather obtuse at the apex ; volutions five, increasing rapidly, rounded, with 3 or 4 rather obsolete keels ; aperture large, circular, slightly emarginated posteriorly, with a thickened, reflected, white peritreme, slightly interrupted at the last volution ; columellar lip rather spread, partly covering the middle-sized umbilicus ; suture distinct ; operculum thin, horny, multispiral, with the edges of its volutions lamellar.

Many varieties of this species were brought by Mr. Cuming from the Philippine Islands, see Zool. Proc. 1842.

101. *C. LINGULATUM*. (pl. xxix. f. 208, 209, 210.) *nob.*

*T.* suborbiculari, subdepresso-conoideâ, tenuiusculâ, lævigatâ, pallidâ, fusco variè maculatâ, vel radiatim strigatâ ; spirâ brevi, subacuminatâ, apice obtusiusculo, suturâ subinconspicuâ ; anfractibus  $4\frac{1}{2}$ , ventricosiusculis, plerumque acutimarginatis, nonnunquam margine ultimi rotundato ; aperturâ circulari, peritremate pallido, plerumque duplici, interno lineari, externo latiori, reflexo, supra umbilicum plus minusve latè extenso ; umbilico mediocri ; operculo corneo, tenui, multispirali.

Shell suborbicular, rather depressedly conoidal, thinnish,

smooth, of a pale colour, variously mottled and radiately striped with brown; spire short, slightly acuminate and rather obtuse; suture not very distinct; volutions  $4\frac{1}{2}$ , rather ventricose, generally with a sharply keeled edge, but sometimes having the edge of the last volution rounded; aperture circular, with a whitish, generally double, peritreme, inner peritreme linear, outer broader, reflected, more or less broadly extended over the umbilicus; umbilicus moderate; operculum horny, thin, multispiral.

Many varieties of this elegant species were brought by Mr. Cuming, from the Islands of Siquijod, Zebu, and Bohol.

102. *C. CILIATUM*. (pl. xxx. f. 237, 238.) *nob.*

*T. suborbiculari*, conoideâ, tenuiusculâ, lævigatâ, fulvescente, fusco-radiatim strigatâ; spirâ brevi, submucronatâ, apice acuminatusculo; anfractibus quinque subrotundatis, ultimo magno, margine carinato, (carinâ epidermide ciliatâ;) aperturâ circulari, peritremate reflexo, posticè emarginato; umbilico magno; operculo tenui, corneo, multispirali.

Shell suborbicular, conoidal, thin, smooth, pale yellowish brown, with irregular radiating brown stripes; spire short, with a rather acuminate apex, and five slightly rounded volutions, of which the last is large and keeled at its edge, where the epidermis forms a fringe of hairs; aperture circular, peritreme reflected, forming a very small notch at the upper or posterior extremity; umbilicus large; operculum thin, horny, multispiral. Found under stones at South Camarinas, Luçon, by Mr. Cuming.

103. *C. HELICOIDE*. (pl. xxx. f. 245, 246.) *nob.*

*T. suborbiculari*, conoidali, crassiusculâ, spiraliter striatâ, fulvescente, fusco-radiatim strigatâ; spirâ brevi, acuminatusculâ, anfractibus 5 ad 6, rotundatis, anticè lævibus, posticè spiraliter striatis, obsoletè 4 ad 5 carinatis, carinis duabus posticis, epidermide ciliatis; aperturâ circulari, peritremate duplici, albicante, postice emarginato, interno tenui, levatusculo, externo angusto, reflexo; umbilico majusculo; operculo tenui, corneo, multispirali.

Shell suborbicular, conoidal, rather thick, spirally striated, yellowish brown, with radiating dark brown stripes; spire short, rather acuminate, with 5 to 6 rounded volutions, smooth anteriorly; spirally striated posteriorly, and with four or five obsolete keels, of which the two posterior are ciliated with



epidermis; aperture circular, peritreme double, whitish, forming a very small notch at the upper or posterior extremity; umbilicus rather large; operculum thin, horny, multispiral.

Found under decayed leaves in the Island of Bohol, by Mr. Cuming.

104. *C. CLAUSUM*. (pl. xxxi. f. 266, 267.) *nob.*

*T. subgloboseâ, crassiusculâ, lævi, albicante, posticè fulvescente, spirâ brevi, subdepressâ, apice obtuso; anfractibus 3½, subrotundatis, posticè spiraliter striatis; aperturâ subcirculari, posticè subacuminato, peritremate tenui, subreflexo, latere umbilicali crassiusculo, rotundato, umbilicum claudente.*

Shell subglobose, thickish, smooth, whitish, rather fulvous at the obtuse apex of the rather depressed, short spire; volutions 3½, somewhat rounded, spirally striated posteriorly; aperture nearly circular, rather acuminate behind, with a thin, slightly reflected peritreme, thickish and rounded toward the umbilicus, which is covered by it.

From Yemen, Arabia, Mr. Powis.

105. *C. ATRAMENTARIUM*. (pl. xxx. f. 236.)

*T. orbiculato-pyramidali, crassiusculâ, lævigatâ, purpureo-nigricante, nonnunquàm fusco-maculatâ; spirâ mediocri, conicâ, obtusâ, anfractibus quinque ad sex, rotundatis, tenerrimè transversim striatis; suturâ distinctâ; aperturâ circulari, margine labii duplicato, peritremate reflexo, latiusculo, umbilicum versus angulato; umbilico mediocri.*

Shell nearly orbicular, pyramidal, thickish, smooth, of a purplish black colour, sometimes paler and variously spotted with brown; spire of moderate length, conical, obtuse at the apex, and consisting of from five to six rounded volutions, which are very finely transversely striated, and separated by a distinct suture; aperture circular, margin of the lip double, peritreme reflected, rather broad, and angular towards the umbilicus, which is of moderate size.

106. *C. HARVEYANUM*. (pl. xxx. f. 250.) *nob.*

*T. sub-globoso-conicâ, crassiusculâ, spiraliter sulcatâ, fulvescente, spiræ apice obtuso, anfractibus 4½ rotundatis, tenerrimè transversim striatis, ultimo fasciâ fuscâ antemedianâ; aperturâ circulari, peritremate albido, subincrassato, subreflexo, posticè paululùm acuminato; umbilico majusculo.*

Shell rather globosely conical, thickish, spirally grooved, of a fulvous colour; volutions 4½, rounded, very finely transversely striated, the last with a fuscous band in front of the

periphery; aperture circular, peritreme whitish, rather thickened, slightly reflected and a little acuminate posteriorly; umbilicus rather large. Communicated by Lady Harvey.

107. *C. CINCTUM*. (pl. xxix. f. 199.) *nob.*

Testâ globoso-conoidali; crassiusculâ, pallidâ, fasciâ fuscâ unicâ infra-medianâ; anfractibus 4—5 rotundatis, supernè spiraliter sulcatis, infrâ læviusculis; suturâ distinctâ; aperturâ circulari, intus fulvâ; peritremate subincrassato, subreflexo, latere umbilicali subexpanso, prope ultimùm anfractum sinuato, tenuiori; umbilico majori, intus spiraliter sulcato.

Shell globosely conoidal, thickish, and of a pale colour, with a single fuscous band below the middle of the volutions; volutions from 4 to 5, rounded, spirally grooved on the upper part, smooth beneath; suture distinct; aperture circular, fulvous within; peritreme somewhat thickened and rather reflected, spreading out on the umbilical side, thin and sinuated at that part which lies next to the last volution; umbilicus large, spirally grooved within. E. Indies.

108. *C. PYROSTOMA*. (pl. xxix. f. 200.) *nob.*

T. subgloboso-conicâ, tenuiusculâ, flavescente, aurantiaco pallidè strigatâ, spirâ mediocri, apice obtusiusculo, anfractibus 5, rotundatis, posticè spiraliter striatis; suturâ distinctâ; aperturâ ferè circulari, peritremate aurantiaco, subincrassato, rotundato, subreflexo, posticè subacuminato, prope ultimum anfractum subinterrupto; umbilico magno.

Shell subglobosely conical, rather thin, yellowish, with stripes of pale orange colour; spire of moderate length, rather obtuse at the apex; volutions five, rounded, spirally striated posteriorly, and smooth anteriorly, with a distinct suture; aperture nearly circular, with a slightly thickened, orange coloured, rounded, subreflected peritreme, slightly acuminate behind, and interrupted for a short distance next to the last volution; umbilicus rather large.

From Miss Saul's collection, locality unknown.

109. *C. PULCHELLUM*. (pl. xxxi. f. 263, 264.) *nob.*

T. tenui, subgloboso-conoideâ, pallescente, tenuissimè spiraliter striatâ; anfractibus 5, ventricosissimis, fasciis 5—6 interruptis fuscis; ultimo carinâ parvâ medianâ; aperturâ circulari, peritremate reflexo, aurantiaco; umbilico mediocri, intus spiraliter sulcato; suturâ validâ.

Shell thin, of a conoidal nearly globose form, and of pale colour, smooth, very finely spirally striated; volutions five, very ventricose and rounded, with five or six much

interrupted brown bands; last volution with a small keel near the middle: aperture circular, with a reflected reddish orange peritreme: umbilicus of moderate dimensions, spirally grooved within; suture distinct.

Locality unknown. The specimen from which our drawing and description were taken was obligingly communicated by *M. Keraudren*.

110. *C. GOUDOTIANUM*. (pl. xxix. f. 193.)—?

*T.* subgloboso-conicâ, tenui, lævi, fulvâ, spirâ gradatim acuminatâ, apice obtuso, nigricante, anfractibus quinque, rotundatis, spiraliter tenerrimè striatis et rufo-nigricante quadrifasciatis, aperturâ circulari, peritremate tenui, extus lato, reflexo, latere umbilicali angusto, reflexo; umbilico mediocri, spiraliter striato.

Shell subglobosely conical, thin, smooth, yellow, spire gradually acuminate, with an obtuse blackish apex; volutions 5, rounded, very finely spirally striated and with 4 reddish black bands; aperture circular, peritreme thin, its outer edge broad and reflected, inner edge narrow and turned back; umbilicus of moderate size, spirally striated within. Found at Natal, by Dr. Krauss.

111. *C. VIRGATUM*. (pl. xxix. f. 192.) *nob.*

*T.* oblongo-pyramidal, tenuiusculâ, palléscente, lævi, spirâ acuminatâ, apice obtusâ; anfractibus quinque, rotundatis, spiraliter castaneo fasciatis; aperturâ circulari, peritremate subreflexo, ad ultimum anfractum interrupto; umbilico parvo; operculo testaceo, paucispirali, anfractibus transversim undato-striatis.

Shell of an oblong pyramidal form, rather thin, smooth and of a pale brownish colour; spire regularly acuminate, with an obtuse apex; volutions 5, rounded, with chestnut coloured spiral bands; aperture circular, with a slightly reflected peritreme, a little interrupted at the last volution; umbilicus small; operculum testaceous, with few volutions, which are transversely undato-striated. Locality unknown.

112 *C. FLEXILABRUM*. (pl. xxxi. f. 258. 259.) *nob.*

*T.* globoso-conoideâ, crassâ, lævi, brunnescente; spirâ obtusâ, anfractibus  $4\frac{1}{2}$ , subventricosis, ultimo rotundâto, fasciis castaneis spiralibus ornato; aperturâ ferè circulari, peritremate incrassato, reflexo, posticè sinuato; umbilico minimo, lineari, vel clauso.

Shell globosely conoidal, thick, smooth, brownish; spire obtuse, volutions  $4\frac{1}{2}$ , rather ventricose, the last rounded and

ornamented with a chestnut spiral band; aperture nearly circular, with a thickened, reflected peritreme; sinuated posteriorly; umbilicus very small and linear, or closed.

Madagascar, communicated by Mr. Powis.

113. *C. ICTERICUM*. (pl. xxxi. f. 268. 269.) *nob.*

*T.* globoso-conicâ, crassiusculâ, fulvescente, spirâ acuminatâ, apice decollato; anfractibus 4, rotundatis, spiraliter sulcatis; aperturâ circulari, peritremate incrassato, reflexo, suprâ umbilicum parvum crasso, extenso, umbilicum ferè tegente, posticè subacuminato; sulcis spiralibus umbilici majoribus.

Shell globosely conical, thickish, fulvous, with an acuminate spire, apex decollated; volutions 4, rounded, spirally grooved; aperture circular, peritreme thickened, reflected, thick and spread over the small umbilicus so as to cover it, and somewhat acuminate posteriorly; spiral grooves of the umbilicus larger than the others.

114. *C. MEGACHEILUS*. (pl. xxxi. f. 276.) *nob.*

*T.* globoso-conicâ, crassiusculâ, brunnescente, fasciâ antè mediam castaneâ; spirâ breviusculâ; anfractibus  $4\frac{1}{2}$ , rotundatis, posticè lineis levatis spiralibus, albo-castaneoque articulatis, ultimo anticè lævi; aperturâ circulari, peritremate crasso, reflexo, rotundato, albicante; umbilico mediocri.

Shell globosely conical, thickish, brownish, with a chestnut band in front of the periphery; spire rather short, with  $4\frac{1}{2}$  rounded volutions, posteriorly with raised white spiral lines with chestnut spots, the last smooth in front; aperture circular, peritreme thick, reflected, rounded, broad, whitish; umbilicus of moderate size.

115. *C. GUIMARASENSE*. (pl. xxxi. f. 274. 275.) *nob.*

*T.* globoso-conicâ, tenui, brunneâ, pallescente maculatâ, ad suturam articulatâ: spirâ acuminatâ, apice obtusiusculâ; anfractibus 5, ventricosis, posticè obsoletè 2 vel 3 carinatis; aperturâ circulari, amplâ, peritremate tenuiusculo, reflexo, albo: umbilico mediocri.

Shell globosely conical, thin, brown, varied with paler, and with an articulated brown and whitish band at the suture; spire acuminate, with an obtuse apex; volutions 5, ventricose, posteriorly with 2 or 3 obsolete keels; aperture circular, large; peritreme rather thin, reflected, white; umbilicus middling. From the Island of Guimaras, H. Cuming.

116. *C. LATILABRUM*. (pl. xxxi. f. 281.) *D'Orb.*

*T.* globoso-conoideâ, tenui, subhyalinâ, albidâ; apice decollato; anfractibus 4, rotundatis, tenuissimè transversim



striatis; suturâ profundâ, aperturâ circulari; peritremate duplici, interno subreflexo; externo latè expanso; umbilico magno.

Shell globosely conoidal, very thin, slightly hyaline, whitish; apex truncated; volutions 4, rounded, and very delicately transversely striated, with a deep suture; aperture circular; peritreme double, inner slightly reflected, outer widely spread, thin; umbilicus large.

117. *C. PULCHRUM*. (pl. xxvii. f. 143. 144.) *Gray*, in *Supp. to Wood's Ind. Testac.*

*T.* suborbiculari, spirâ conoidali, apice mamillari (plerumque decollato) anfractibus 3—5, ventricosi, rotundatis, spiraliter carinatis, et transversim striatis; suturâ profundâ; aperturâ circulari; peritremate duplici, interno tenui, elevatiusculo, externo lato, reflexo, undulato; umbilico magno, spiraliter carinato et transversim striato.

Shell nearly orbicular, with a rather short conical spire, the apex of which is mamillated, it is, however, generally decollated; volutions 3—5, (3 when decollated, 5 when complete) ventricose, rounded, with 8 or 10 spiral keels, and transversely striated; suture deep; aperture circular, with a double peritreme, the inner of which is thin and slightly elevated, the outer broad, reflected, and undulated, each undulation forms at the back the continuation of one of the spiral keels, and the beautiful fringe or ruffle formed by this undulated peritreme, is concentrically striated. The whole shell is of a fawn colour, with dark marks arranged in rows above and below the spiral keels; these keels are only distinct on the two last volutions. That side of the reflected peritreme which is towards the last volution, is spread over it a little. Jamaica.

118. *C. FIMBRIATULUM*. (pl. xxviii. f. 145, 146.) *Sow.* in *Tank. Cat. App.* p. viii. no. 1015.

*T.* globoso-conoideâ, albidâ, spirâ breviusculâ, decollatâ: anfractibus 4—5, rotundatis, spiraliter sulcatis, sulcis confertissimè decussatis, asperis; suturâ profundâ; aperturâ circulari; peritremate duplici, interno simplicissimo, externo latè expanso, undulato; umbilico magno; operculo testaceo, spirali, anfractibus intùs lævibus, extùs lamellâ spirali reflexâ.

Shell globosely conical, whitish, with a rather short decollated spire, consisting of from 4 to 5 rounded, spirally grooved volutions, rough, with very close-set decussated striæ; suture deep; aperture circular, peritreme double, the inner one very simple, the outer one broadly expanded and undulated;

umbilicus large ; operculum shelly, spiral, its volutions smooth within, and with a reflected spiral lamella outside. Jamaica.

119. *C. SCABRICULUM*. (pl. xxviii. f. 147.) *nob.*

*T.* globoso-conoideâ, albidâ, spirâ breviusculâ, decollatâ, anfractibus quatuor, rotundatis, spiraliter sulcatis, sulcis confertissimè decussatis, asperis ; suturâ distinctâ ; aperturâ circulari, peritremate duplici, interno tenui, externo latè expanso, undulato, posticè undulato-lamellari : umbilico mediocri ; operculo lamellâ levatâ spirali.

Shell globosely conoidal, whitish, with a rather short decollated spire, consisting of 4 rounded, spirally grooved volutions ; grooves very finely decussated, rough ; suture distinct ; aperture circular, peritreme double, inner thin, outer broadly expanded, undulated, posteriorly undulated lamellar ; umbilicus middling ; operculum with a spiral elevated lamella.

Jamaica.

120. *C. LÆVE*. (pl. xxix. f. 220 to 222.) *Gray*. in *Supp.* to *Wood's Ind. Testac.* t. 6. f. 5. *Turbo immaculatus*, &c. *Chemn.* ix. p. 57. t. 123. f. 1063.

*T.* globoso-conicâ, tenui, pellucidâ, albidâ, lævi, spirâ acuminatâ ; anfractibus quinque, subrotundatis, ultimo ventricosos ; aperturâ subcirculari ; peritremate reflexo, latere columellari sinuato ; suturâ subobtectâ ; umbilico parvo ; operculo tenui, corneo, spirali.

Shell globosely conical, thin, pellucid, whitish, smooth, with an acuminate spire ; volutions 5, slightly rounded, the last ventricose ; aperture nearly circular ; peritreme reflected, its columellar side sinuated ; suture partly hidden ; umbilicus small ; operculum thin, horny, spiral. First brought by Dr. Solander, in 1780. I have since received it from Luçon, collected by J. K. Smith, Esq., and Mr. Cuming has brought six varieties from the Philippine Islands. The young shell is keeled.

121. *C. NITIDUM*, (pl. xxix. f. 225, 226, 227.) *nob.*

*T.* globoso-conicâ, tenui, pellucidâ, lævi, albidâ, interdum fusco-variegatâ ; spirâ acuminatâ, anfractibus 5, rotundatis, ultimo maximo, ventricosos ; aperturâ circulari, peritremate reflexo, latere columellari subsinuato ; suturâ distinctâ ; umbilico parvo : operculo tenui, corneo, spirali.

Shell globosely conical, thin, pellucid, smooth, white, or whitish variously speckled and marked with brown ; spire acuminate, consisting of 5 rounded volutions, of which the last is very large and ventricose : aperture circular, with a

reflected peritreme, which is slightly sinuated on the side towards the umbilicus, which is small; suture distinct; operculum thin, horny, of 5 or 6 volutions. Found on leaves of trees and shrubs in the Islands of Guimaras and Zebu, H. Cuming.

122. *C. CONCINNUM*. (pl. xxix. f. 223. 224.) *nob.*

T. globoso-conicâ, tenui, pellucidâ, lævi, albidâ, viridifusco spiraliter lineatâ; spirâ acuminatâ, anfractibus 5, rotundatis, ultimo maximo, ventricosus; aperturâ circulari, peritremate reflexo, latere columellari subsinuato; suturâ distinctâ; umbilico parvo; operculo tenui, corneo, spirali.

Shell globosely conical, thin, pellucid, smooth, whitish with spiral greenish brown lines; spire acuminate, of 5 rounded volutions, of which the last is very large and ventricose; aperture circular, with a reflected peritreme, and slightly sinuated on the side next to the umbilicus; suture distinct umbilicus small; operculum horny, thin, spiral.

In the young state, while the epidermis remains, the greenish brown spiral lines are hairy. Several varieties were found by M. Cuming, on leaves of trees and bushes in the Islands of Bohol, Mindanao, and Camiguin.

123. *C. PANAYENSE*, (pl. xxx. f. 239.) *nob.*

T. globoso-conicâ, tenuissimâ, pellucidâ, lævi, fuscescente, spirâ brevi, obtusiusculâ, anfractibus quinque, spiraliter et distanter substriatis, rotundatis, ultimo anticæ ad peripheriam carinâ obsoletâ munito; aperturâ magnâ, ferè circulari, peritremate lato, reflexo, ad ultimum anfractum interrupto, margine interno albo, externo fusco; umbilico parvo; operculo tenui, corneo, anfractibus 5—6.

Shell globosely conical, very thin, pellucid, smooth, brownish; spire short, rather obtuse; volutions five, rounded, distantly spirally striated, the last furnished with a very indistinct keel at the periphery; aperture large, nearly circular, with a broad reflected peritreme, interrupted over the last volution, with a white internal and brown outer margin; umbilicus small; operculum thin, horny, of five or six volutions.

Found on leaves of bushes at Dingle in the Island of Panay, by Mr. Cuming.

124. *C. VITREUM*. (pl. xxx. f. 252.) *Lesson.*

T. globoso-conicâ, tenuiusculâ, lævi, subpellucidâ, fulvescente, spirâ acuminatâ, anfractibus 5—6, rapidè crescentibus, rotundatis, suturâ distinctâ; aperturâ ferè circulari, peritremate albo, incrassato, reflexo, ad ultimum anfractum subin-

terrupto, latere umbilicali subsinuato, demùm latiori, subangulato; umbilico parvo; operculo testaceo, extùs concavo, anfractibus 4—5.

Shell globosely conical, rather thin, smooth, slightly pellucid, fulvous, with an acuminate spire; volutions 5—6, increasing rapidly, rounded, with a distinct suture; aperture nearly circular; peritreme white, thickened, reflected, interrupted at the last volution, slightly sinuated on the umbilical side, when it becomes broader and rather angular, umbilicus small; operculum shelly, concave outwardly, its volutions 4—5. From New Ireland, Mr. Hinds.

125. *C. LUTEOSTOMA*. (pl. xxx. f. 228, 229.) *nob.*

T. globoso-conicâ, tenui, pellucidâ, albidâ, epidermide tenui, corneâ indutâ; spirâ acuminatâ; anfractibus quinque, rotundatis, ultimo magno, ventricoso; aperturâ subcirculari, peritremate reflexo, aurantiaco, latere columellari subsinuato, propè ultimum anfractum interrupto; suturâ distinctâ, umbilico parvo; operculo tenui, corneo, multispirali.

Shell globosely conical, thin, pellucid, whitish, covered with a thin horny epidermis; spire somewhat acuminate, with five rounded volutions, of which the last is large and ventricose; aperture nearly circular, with a reflected orange coloured peritreme, slightly sinuated on the columellar side, interrupted and very thin upon the last volution; suture distinct, umbilicus small, operculum thin, horny, multispiral.

Found on leaves of bushes in the Island of Guimaras, and at Dingle I. of Panay. by Mr. Cuming.

126. *C. FIBULA*, (pl. xxx. f. 240. 241. 242.) *nob.*

T. suborbiculato-conicâ, tenui, cinerascete-fuscâ vel albidâ, nonnunquam fusco angulatim strigatâ, spirâ acuminatiusculâ, anfractibus 5—6, lævibus, lineis spiralibus nonnullis elevatiusculis, ultimo magno, anticè obtusè carinato, ante peripheriam subplanulato; aperturâ subobliquâ, rotundato-subquadratâ, peritremate reflexo, supra ultimum anfractum latè interrupto, latere umbilicali rotundato, revolutò; umbilico parvo, angusto: operculo tenui, corneo, anfractibus 6—7.

Shell suborbicular-conical, thin, light greyish brown or whitish, sometimes more or less strongly marked with irregularly angular brown stripes and specks; spire rather acuminate; volutions 5 or 6, smooth, with several slightly elevated spiral lines, the last large, very obtusely carinated in front, and rather flattened before the periphery; aperture rather oblique, of a rounded subquadrate form, with a reflected



peritreme which is broadly interrupted at the last volution and rounded and turned back on the side of the umbilicus, which is small and narrow; operculum thin, horny, with 6 or 7 volutions. Found on leaves of palms and other trees, in the north part of the Island of Luçon, by Mr. Cuming.

127. *C. PERPLEXUM*. (pl. xxx. f. 243. 244.) *nob.*

*T.* suborbiculari, subconicâ, tenui, albidâ, pallidè fusco variè nubeculatâ; spirâ brevi; anfractibus quinque subrotundatis, lævibus, ultimo ad peripheriam subcarinato, posticè lineis levatiusculis distantibus nonnullis munito; suturâ indistinctâ; aperturâ subcirculari, peritremate crassiusculo, reflexo, ad ultimum anfractum interrupto, latere umbilicali revoluto, umbilico mediocri.

Shell suborbicular, subconical, thin, whitish, variously mottled and speckled with pale brown; spire short, volutions 5, rather rounded, smooth, the last slightly carinated at the periphery, and having several posterior slightly elevated distant lines; aperture nearly circular, peritreme thickish, reflected, interrupted at the last volution, rounded and turned back on the side of the umbilicus, which is of moderate size. Found on bushes at Abulug, by Mr. Cuming.

128. *C. PILEUS*. (pl. xxix. f. 196. 197.) *nob.*

*T.* conicâ, tenui, albidâ, fusco pallidissimè nubeculatâ; spirâ subacuminatâ, anfractibus quinque, planulatis, anticè carinatis; aperturâ rotundato-subtrigonâ, extûs angulatâ, peritremate albo, reflexo, labiis posticè disjunctis; umbilico parvo.

Shell conical, thin, whitish clouded with very pale brown, spire rather acuminate, with 5 flattened volutions, keeled in front; aperture subtrigonal, rounded, angular outside, peritreme white, reflected, lips disunited posteriorly; umbilicus small. Several varieties of this species were found by Mr. Cuming, under decayed leaves, near Sinait and St. Juan.

129. *C. STAINFORTHII*. (pl. xxix. f. 215. 216. & pl. xxx. f. 217.) *nob.* Zool. Proc. 1842, p. 82.

*T.* tenui, albicante, pyramidalî, carinatâ; spirâ acuminatiusculâ, anfractibus 5—6, lateribus subventricosus, ultimo longè maximo, margine mediano carinato, lineis spiralibus fuscis 4—6 ornato; suturâ subobsoletâ; aperturâ magnâ, suborbiculari, latere columellari rectiusculo; peritremate albo, subincrassato, reflexo, supra anfractum penultimum subinterrupto; umbilico mediocri; operculo corneo, tenui, marginibus anfractuum lamellosis, levatiusculis.

Shell pyramidal, thin, whitish, keeled around the edge; spire rather acuminate, volutions 5—6, slightly ventricose on the sides, the last by far the largest, with its medial edge keeled, and having from 4 to 6 spiral brown lines; suture rather indistinct; aperture large, suborbicular, with its columellar side rather straight; peritreme white, somewhat thickened, reflected, somewhat interrupted at the last volution; umbilicus moderate; operculum horny, thin, with the edges of its volutions lamellar, rather elevated. Found by Mr. Cuming on leaves of trees and bushes, in several of the Philippine Islands, and named in honour of the Rev. F. J. Stainforth.

130. *C. ATRICAPILLUM*. (pl. xxx. f. 230. 231.) *nob.*

*T. globoso-pyramidalis, tenui, nitidulâ, albicante, variè fusco-strigatâ, apice nigro, anfractibus 5, subrotundatis, plus minusve obsoletè spiraliter carinatis; suturâ distinctâ; aperturâ rotundatâ, supernè subacuminatâ; peritremate acuto, reflexo, latere umbilicali subsinuato, ultimi anfractûs interrupto; umbilico parvo; operculo corneo, tenui.*

Shell globoso-pyramidal, thin, somewhat shining, whitish, variously striped and speckled with dark brown, and having a black apex; volutions 5, rather rounded, more or less obsoletely spirally carinated; suture distinct; aperture round, rather acuminate at the upper part; peritreme acute, reflected, slightly sinuated on the side toward the umbilicus, interrupted against the last volution; umbilicus small. First brought from the Philippine Islands by J. D. Smith, Esq. Mr. Cuming collected several varieties on the leaves of trees and shrubs, at Puerto-galero, in the Island of Mindoro.

131. *C. GONIOSTOMA*. (pl. xxx. f. 233. 234.) *nob.*

*T. suborbiculari, conoideâ, margine carinato, tenui, subpellucidâ, lævi, albidâ, fusco-varie strigatâ, spirâ acuminatâ, apice nigricante, obtusiusculo; anfractibus 5½, planulatis, ultimo subventricoso, obsoletè bi-vel tri-carinatis, margine acuto, anticè subplanulato; aperturâ rotundato-subtrigonâ, anticè subrotundatâ, posticè extusque angulatâ, peritremate tenui, angusto, reflexo; umbilico parvo.*

Shell suborbicular, conical, with a carinated edge, thin, rather pellucid, smooth, whitish, variously striped with brown; spire acuminate, rather obtuse, blackish; volutions 5½, flattened, the last slightly ventricose, with two or three obsolete keels, sharp at the edge, flattened in front; aperture of a rounded subtriangular form, rounded in front, and angular posteriorly as well as at the external edge; with a thin, narrow,

reflected peritreme; umbilicus small. Two varieties were found by Mr. Cuming, at Cagayan in the Island of Mindanao.

132. *C. INSIGNE*, (pl. xxx. f. 232.) *nob.*

*T.* subglobosâ, subconoideâ, prætenui, corneâ, pellucidâ, viridescente-fuscâ; spirâ acuminatusculâ; anfractibus quinque, primis rotundatis, lævibus, duobus ultimis tenerrimè transversim striatis, margine acutè carinato, posticè subplanulatis, 5 ad 7 carinatis, ultimo maximo, anticè subobsolete 2 vel 3 carinatis; aperturâ magnâ, subcirculari, peritremate tenui, reflexo, intùs albo, ultimo anfractu modificato; umbilico exiguo; operculo tenui, corneo.

Shell subglobose, somewhat conoidal, very thin, horny, pellucid, of a greenish brown colour; spire rather acuminated; volutions five, of which the three first are rounded and smooth, and the two last very finely transversely striated, with a sharp keeled edge, rather flattened posteriorly and having from 5 to 7 rather obsolete keels; the last volution very large, with two or three rather obsolete keels anteriorly; aperture large, nearly circular, with a thin, reflected peritreme, white on the inner edge and modified by the last volution; umbilicus small, operculum horny, very thin. Found on leaves of trees at Calapan, Island of Mindoro, by Mr. Cuming.

133. *C. ACUMINATUM*. (pl. xxx. f. 235.) *nob.*

*T.* subglobosâ, pyramidali, tenui, lævi, pellucidâ, albicante, spirâ acuminatâ, apice obtusiusculo, fuscescente; anfractibus sex, rotundatis, substriatis, ultimo magno, carinâ ad peripheriam obsoletiusculâ munito, ante carinam planulatusculo; aperturâ subcirculari, posticè subacuminatâ, peritremate tenui, reflexo, ad ultimum anfractum interrupto; latere umbilicali subsinuato; umbilico parvo.

Shell subglobose, pyramidal, thin, smooth, pellucid, whitish; spire acuminated, with a rather blunt, brownish apex, volutions six, rounded, very slightly and distantly striated, the last large, furnished with an indistinct keel at the periphery and very slightly flattened in front of the keel; aperture nearly orbicular, slightly acuminated posteriorly with a thin reflected peritreme, interrupted at the last volution, and slightly sinuated at the side next to the umbilicus, which is very small. Found by Mr. Cuming on leaves of trees at St. Juan, Island of Luçon.

134. *C. TENUE*, (pl. xxxi. f. 265.) *nob.*

*T.* globoso-pyramidali, tenui, albicante, opacâ; spirâ acuminatusculâ, apice obtuso; anfractibus 5—6, rotundatis, posticè

spiraliter substriatis, ultimo fulvo-unifasciato, anticè lævi; suturâ profundâ; aperturâ rotundatâ; peritremate tenui, sub-reflexo; umbilico mediocri.

Shell globoso-pyramidal, thin, nearly white, dull; spire rather acuminate, but with an obtuse apex; volutions 5—6, rounded, slightly spirally striated posteriorly; the last volution with a single fulvous band and smooth in front; suture deep; aperture round, peritreme thin, very slightly reflected; umbilicus middling. Africa; Mr. Gray.

135. C. GIBBUM, (pl. xxx. f. 247. 248.) *Fer. Mag. de Zool.* pl. 117. f. 1.

T. suborbiculari, subpyramidal, tenui, subdistortâ, cinerascens, spirâ mediocri, obtusâ, apice rufescente, anfractibus quinque rotundatis, transversim striatis, ultimi dorso inflato, demum coarctato et quasi strangulato; aperturâ circulari, margine duplicato, umbilicum versus subsinuato, peritremate latiusculo, reflexo, acuto, umbilicum versus angustiori; umbilico mediocri.

Shell nearly orbicular, somewhat pyramidal, rather thin, and having a distorted appearance, ash-coloured; spire of moderate length, blunt, with a dull red apex, consisting of five rounded, transversely striated volutions, the dorsal portion of the last volution inflated, and then suddenly contracted, as if strangled; aperture circular, having a double margin, and slightly sinuated on the side toward the umbilicus, with a rather broad, sharp-edged, reflected peritreme, narrower toward the umbilicus, which is of moderate dimensions. Operculum circular, horny, exactly closing the contracted part or throat of the aperture.

From the grottos of Touranne, in Cochinchina.

136. C. PRETREI, (pl. xxxi. f. 260.) *D'Orb.*

T. globoso-pyramidal, tenui, scabrâ, albâ, spirâ acuminatâ, apice decollato, fusco; anfractibus 4, rotundatis, transversim striatis et costatis, costis minutis, subdistantibus, muricatis, ultimo propè aperturam disjuncto: suturâ profundâ; aperturâ circulari, peritremate duplici, interno simplici, externo angusto, reflexo, undulato; umbilico magno, spiraliter costato.

Shell globosely-pyramidal, thin, white, rough; spire acuminate, its apex decollated, brown; volutions four, rounded, transversely striated and ribbed; ribs small, distant, muricated; the last volution disjoined near the aperture; suture deep; aperture circular, peritreme double, inner simple, outer nar-



row, reflected, undulated; umbilicus large, spirally ribbed.

From Cuba, communicated by D'Orbigny.

137. *C. LINCINELLUM*, (pl. xxviii. f. 150. 151.) *Lam. Anim. s. vert. vi. 2. p. 148.* *C. Lincina*, *Encycl. Meth. t. 461. f. 2.* *C. compressum*, Gray. in *Supp. to Ind. Testac. t. 6. f. 42.*

*T.* globoso-conoideâ, pallidâ, seriatim fusco-maculatâ, spirâ subacuminatâ; anfractibus 4—5, rotundatis, subtilissimè striatis, ultimi terminatione subporrecto, disjuncto; suturâ profundâ; aperturâ circulari; peritremate duplici, continuo, interno simplici, porrecto, externo angusto, expanso; umbilico parvo; operculo spirali, anfractibus paucis, extûs lamellâ spirali, reflexâ.

Shell globosely conical, of a pale colour, with rows of fuscous spots, spire rather acuminate, consisting of four or five rounded volutions, which are very finely striated, the last volution separated at its termination and standing forward; suture deep; aperture circular; peritreme double, continuous, the internal simple, standing forward, the external narrow, spreading; umbilicus small; operculum spiral, consisting of few volutions, with a spiral reflected lamella outside.

Jamaica. Mr. G. Humphrey.

138. *C. LINCINUM*, (pl. xxviii. f. 148. 149.) *Turbo Lincina*, *Linn. Syst. Nat. ed. 12. t. 1. p. 1239, no. 639. Chemn. ix. f. 1060. a.*

*T.* oblongâ, pallidâ, spirâ decollatâ; anfractibus 3—4, terentibus, confertissimè decussato-striatis, asperis; suturâ profundâ; aperturâ circulari; peritremate dilatato, latè expanso, planiusculo, crenato, supernè nonnunquam reflexo; umbilico parvo; operculo testaceo, lamellâ externâ spirali, reflexâ, striatâ.

Shell of an oblong, somewhat conical form, with a decollated spire, consisting of three or four rounded volutions, which are rough all over, with close set decussating striæ; suture deep; aperture circular; peritreme dilated, spreading widely, rather flat, crenated, the upper part sometimes reflected; umbilicus small, externally with a spiral, reflected, striated lamella. This is undoubtedly Linné's *Turbo Lincina*, with which Lamarck's *Cycl. Lincinella* and his *Cycl. interrupta*, have both been confounded, neither of which, however, agrees with the character Linné gives of his *T. Lincina*, viz. *T. testa oblonga, obtusa, rugoso striata, apertura limbo dilatato plano crenato.*

Jamaica.

139. *C. ALBUM*, (pl. xxviii. f. 154.) *nob.*

*T.* oblongâ, albâ, spirâ subconoidali, decollatâ; anfractibus 3—4, rotundatis, lævibus; suturâ distinctâ; aperturâ ellipticâ; peritremate duplici, interno tenui, simplici, externo angusto, subreflexo, supernè angulato.

Shell oblong, white, spire rather conical, decollated; volutions from three to four, rounded, smooth; suture distinct; aperture elliptical; peritreme double, the internal one thin, simple, the external one narrow, somewhat reflected, angular at the upper part.

140. *C. CHEMNITZII*, (pl. xxviii. f. 155. 156.) *Gray.* in Supp. to Wood's Ind. Testac. t. 6. f. 6.

*T.* oblongâ, subconoidali, apice decollato; anfractibus 4—5, rotundatis, lævibus, fasciâ fuscâ spirali unicâ, vel fasciis quatuor fuscis interruptis; suturâ distinctâ; aperturâ subrotundâ, supernè subacuminatâ; peritremate duplici, interno tenui, simplici, externo latiusculo, subexpanso, supernè subacuminato, flexuoso; umbilico minimo; operculo testaceo spirali, anfractibus paucis striatis.

Shell oblong, somewhat conical, apex truncated, with from four to five smooth rounded volutions, sometimes with a single fuscous broad spiral band, or with four narrow spiral interrupted fuscous bands; suture distinct; aperture nearly round, rather acuminate at the upper part; peritreme double, internal slender, simple, external rather wide and spreading, rather acuminate and flexuous at the upper extremity; umbilicus very small; operculum shelly, spiral, consisting of very few striated volutions. South Africa.

141. *C. INTERRUPTUM*. (pl. xxviii. f. 152. 153.) *Lam.* Anim. sans vert. vi. 2, p. 145.

*T.* tenui, pellucidâ, ovato-conoideâ, apice obtuso, fusco; anfractibus 4—5, ventricosis, lævibus, albidis, fasciis luteis, spiralibus, interruptis; suturâ profundâ; aperturâ circulari; peritremate interno tenui, levatiusculo, externo reflexo, dilatato-patente; umbilico parvo.

Shell thin, pellucid, ovately conoidal, with an obtuse dark brown apex; volutions from 4 to 5, ventricose, smooth, whitish, with spiral interrupted fulvous bands; suture deep; aperture circular; internal peritreme thin, rather elevated, external reflected, dilated, spreading; umbilicus small. The smallest volutions are transversely striated. M. Chenu, in the *Receuil*, &c. has given this for *C. ambiguum*, and vice versa has represented Lamarek's *C. ambiguum*, under the name of *C. interruptum*.

142. *C. PICTUM*. (pl. xxviii. f. 157. 158.) *Cistula picta*, *Humph.* M.S. ined.

T. oblongo-conoideâ, tenui, subpellucidâ, spirâ acuminatâ, apice decollato; anfractibus 4—5, ventricosiusculis, lævibus, albis, fusco-marmoratis; suturâ profundâ; aperturâ circulari; peritremate interno tenui, levatiusculo, luteo, externo reflexo, dilatato-patente; umbilico parvo.

Shell oblongo-conoidal, thin, somewhat pellucid, with a gradually tapering acuminate spire, whose apex is decollated; volutions from 4 to 5, rather ventricose, smooth, white, marbled with brown, principally at the lower part; suture deep; aperture circular; internal peritreme slender, rather elevated, yellow, external reflected, spreading; umbilicus small.

Jamaica.

143. *C. SUBASPERUM*. (pl. xxviii. f. 159.) *Lister.* *Cistula decussata*, *Humphrey.* M.S. ined.

T. oblongo-conoideâ, spirâ elevatâ, decollatâ; anfractibus 5—6, rotundatis, subfuscis, albido-marmoratis, decussatim striatis; suturâ distinctâ; aperturâ subellipticâ, disjunctâ, peritremate subrevoluto, latere anfractûs ultimi non continuo; umbilico mediocri.

Shell of an oblong shape, with an elevated, gradually tapering spire, decollated at the apex, with 4 or 5 rounded volutions, of a brown colour marbled with whitish, and wholly covered with decussating striæ; suture distinct; aperture rather elliptical, separated, with a somewhat revolute peritreme, which,\* however, does not continue on the side of the aperture towards the last volution; umbilicus middle-sized. This is one of the largest of the pyramidal Cyclostomata, much resembling *C. Labeo*, from which it may easily be distinguished by the disjoined aperture, and the peritreme not continuing on the side towards the last volution.

East Indies.

144. *C. ARTICULATUM*. (pl. xxviii. f. 160. 161.) *nob.*

T. oblongâ, pyramidalî, spirâ subacuminatâ, plerumque decollatâ; anfractibus 4—7, rotundatis, transversim striatis; albidis, et articulatim fusco-marmoratis; suturâ distinctâ; aperturâ subcirculari; peritremate angusto, reflexo; umbilico mediocri; operculo testaceo, tenui, extûs laminâ spirali conspicuâ.

Shell oblong, pyramidal, with a subacuminated, though generally decollated spire; volutions 4—7, (4 or 5 when decollated, 6 or 7 when entire,) rounded, transversely striated, whitish marbled with fuscous, and having an alternately white

and fuscous band just below the suture, which is distinct; aperture nearly circular, with a narrow, reflected peritreme; umbilicus deep, of moderate extent; operculum thin, shelly, with a distinct spiral lamina outside. This has been confounded with *C. mirabile* of Gray, but may very easily be distinguished by attention to the characters of the peritreme. Demerara.

145. *C. THYSANORHAPHE*. (pl. xxviii. f. 162. 163.) *nob.*

*T. oblongâ, pyramidalî, spirâ acuminatâ, plerumque decollatâ; anfractibus 3—6, rotundatis, transversim striatis, fusco interruptim fasciatis, marginibus superioribus plicato-fimbriatis; (suturem crenulatâ;) aperturâ circulari; peritremate interno crassiusculo, levatiusculo, externo dilatato-patente; umbilico parvo; operculo extus anfractibus 5—6, oblique striatis.*

Shell oblong, pyramidal, with a rather acuminate, but generally decollated spire; volutions 3—6, (3 or 4 when decollated, 5 or 6 when entire,) rounded, transversely striated, of a pale colour, with narrow interrupted fuscous bands, and the upper edges, close to the suture, plicato-fimbriated, the suture itself consequently appearing crenulated: aperture circular; the internal peritreme thickish, rather elevated, the external one wide, spreading; umbilicus small; operculum spiral, consisting of two lamina, the internal smooth and shining, the external with 5 or 6 obliquely striated volutions.

From Demerara and the Antilles.

146. *C. OBESUM*. (pl. xxxi. f. 278.) *nob.*

*T. oblongâ, crassiusculâ, fuscescente, apice decollato, anfractibus 3—4, rotundatis, spiraliter sulcatis, tenerrimè transversim striatis, aperturâ subovali, peritremate tenui, reflexo; umbilico parvo; operculo tenui, anfractibus 3.*

Shell oblong, thickish, of a light brown colour; apex decollated; volutions 3—4, rounded, spirally grooved, and very delicately transversely striated; aperture rather oval, with a thin, reflected peritreme; umbilicus small; operculum thin, with only 3 volutions. Collected by Pfeiffer, in Cuba.

147. *C. PUDICUM*. (pl. xxxi. f. 282.) *D. Orb.*

*T. ovato-pyramidalî, crassiusculâ, tenerrimè decussatâ, rufo-fulvescente; apice decollato; anfractibus 3, rotundatis, peritremate duplici, interno simplici, externo tenui, lato, reflexo, latere columellari emarginato, propè umbilicum incrassato et reflexo, umbilicum claudente.*

Shell ovate pyramidal, thickish, very delicately decussated, reddish fulvous: apex decollated: volutions 3, rounded; peritreme double, inner simple, outer thin, broad, reflected, with



a notch on the columellar side close in front of the umbilicus, thickened and reflected over the umbilicus so as completely to cover it.

Collected by D'Orbigny, in Cuba.

148. *C. BANKSIANUM*. (pl. xxix. f. 194.) *nob.*

*T.* ovato-pyramidal, tenuiusculâ, pallescente, aurantiaco-brunneâ pallidè strigatâ, apice decollato; anfractibus 3 ad 4, rotundatis, tenerrimè transversim striatis, striis paululùm undulatis; suturâ distinctâ, crenulatâ; aperturâ magnâ, circulari, aurantiaco-brunneâ, peritremate duplici, interno tenui, paululùm levato, externo angusto, reflexo, propè ultimum anfractum discontinuo; umbilico mediocri, spiraliter striato.

Shell ovately pyramidal, rather thin, of a light colour, with pale orange-brown stripes; apex decollated; volutions 3—4, rounded, very finely transversely striated, the striae slightly undulated; suture distinct, crenulated; aperture large, circular, orange-brown, with a double peritreme, inner peritreme thin, slightly raised, outer narrow, reflected, not continuous over the last volution; umbilicus middling, spirally striated. From Manchester Mountains, Jamaica; named in honour of Miss Banks, of Doncaster.

149. *C. XANTHOSTOMA*. (pl. xxix. f. 195.) *nob.*

*T.* oblongo-turritâ, crassiusculâ, cinereo-rufescente, apice decollato, anfractibus 4 ad 5, rotundatis, transversim tenerimè striatis, et spiraliter sulcatis, nonnunquam transversim tenuitèr sulcatis, sulcis distantibus; suturâ profundâ; aperturâ subcirculari, peritremate duplici, aurantiaco-rufescente, interno simplici, tenuiusculo, externo latiori, reflexo, tenuitèr subundulato; umbilico mediocri.

Shell oblong, turreted, thickish, reddish-gray, apex decollated; volutions 4 to 5, rounded, very delicately transversely striated, and distinctly spirally grooved; sometimes also with slender, rather distant transverse grooves (apparently marking short periods of growth; ) suture deep; aperture nearly circular, peritreme double, reddish-orange, inner peritreme simple, thin, outer broader, reflected, very slightly undulated, umbilicus moderate.

Savannah la mèr, Jamaica.

150. *C. AUBEREANUM*. (pl. xxxi. f. 285.) *D'Orb. C. crenulatum*. Pf.

*T.* oblongo-pyramidal, crassiusculâ, albicante, fusco angulatim lineolatâ, apice decollato; anfractibus 4, subrotundatis, spiraliter striatis, eleganter decussatis; suturâ crenulatâ; aperturâ subellipticâ, posticè subangulatâ, peritremate subreflexo; umbilico parvo, striis validioribus; operculi anfractibus 2.

Shell oblong, pyramidal, thickish, whitish, with zigzag brown lines; apex decollated; volutions 4, somewhat rounded, spirally striated, and elegantly decussated; suture crenulated; aperture subelliptical, posteriorly a little angular, peritreme somewhat reflected; umbilicus small, with larger striæ; operculum of 2 volutions. Cuba, communicated by D'Orbigny and Pfeiffer. May this be the *C. lineolatum* of Lam?

151. *C. CANDEANUM*. (pl. xxxi. f. 283, 284.) *D'Orb.*

*T.* oblongo-turritâ, tenui, decussatâ, fulvo-rufescente, punctulis castaneis ordinatis; apice decollato; anfractibus 4, subrotundatis, suturâ crenulatâ; aperturâ circulari, posticè subacuminatâ; peritremate duplici, externo latiusculo, reflexo, latere umbilicali angustiori; umbilico parvo.

Shell oblong, turreted, thin, decussated, reddish-brown, with rows of chestnut coloured dots, apex decollated; volutions 4, somewhat rounded; suture crenulated; aperture circular, subacuminated posteriorly; peritreme double, outer rather broad, reflected, narrower on the side of the umbilicus, which is small. Cuba, communicated by D'Orbigny and Pfeiffer. It seems distinct from *C. decussatum* Lam.

152. *C. SAULIÆ*. (pl. xxviii. f. 189.) *nob.*

*T.* pyramidal, subturritâ, tenui, eleganter striatâ, pallescente, brunneo articulatis spiraliter lineatâ, apice decollato, anfractibus quinque, rotundatis, suturâ distinctâ; aperturâ circulari, peritremate duplici, interno tenui paululùm levato, externo latiori reflexo, latere externo crenulato, albo brunneoque articulatis picto, posticè anticeque expanso, prope ultimum anfractum angusto; umbilico mediocri.

Shell pyramidal, subturreted, thin, elegantly striated, of a pale colour, with interrupted brown spiral lines; apex decollated; volutions 5, rounded, with a distinct suture: aperture circular, peritreme double, the inner thin and slightly raised, the outer broader, reflected, with its outer edge crenulated, alternately brown and white, rather more spread both anteriorly and posteriorly, and narrow near the last volution; umbilicus moderate. From the West Indies, named in honour of Miss Saul.

153. *C. MIRABILE*. (pl. xxviii, f. 164.) *Gray* in Wood's Supp. to Ind. Testac. t. 6. f. 22.

*T.* oblongo-pyramidal, tenui, pellucidâ, albidâ, fusco interruptim fasciatâ, spirâ subacuminatâ, obtusâ, plerumque decollatâ; anfractibus 4—7, rotundatis, transversim striatis; aperturâ circulari, peritremate reflexo, dilatato-patente;

umbilico magno; operculo spirali, tenui, anfractibus 5, extûs laminâ latâ trivolutâ conspicuâ.

Shell oblong, pyramidal, thin, pellucid, whitish, with interrupted fuscous bands, spire somewhat acuminate, but obtuse and generally decollated; volutions 4—7, (4 when decollated, 7 when entire) rounded and transversely striated; aperture circular, with a wide spreading, and much reflected peritreme; umbilicus large; operculum spiral, thin, with 5 volutions, and having externally a broad spiral lamina of three whorls. At the upper part of the volutions of this shell there is a strongly marked brown band, with distinct whitish articulations.

From Demerara, G. C. Bainbridge, Esq.

154. *C. LABEO*. (pl. xxviii. f. 165.) *Lam. Anim. s. Vert.* vi. 2. p. 145.

T. oblongâ, pyramidalî, apice decollato; anfractibus 4, rotundatis, subfuscis, decussatim striatis; aperturâ ellipticâ; peritremate albo, reflexo, latiusculo; umbilico mediocri.

Shell oblong, pyramidal, with a decollated apex; volutions 4, rounded, of a brownish colour, and covered with decussating striæ; aperture elliptical, with a broad white reflected peritreme; umbilicus rather small. This is one of the largest of the pyramidal species, being equal in size to *C. subasperum*, to which it bears a general resemblance, and which has been confounded with it. Under that species I have noticed the distinguishing marks.

From Jamaica, *Lam.*

155. *C. RUGULOSUM*, (pl. xxviii. f. 166. 167.) *Pfeiffer*. *Cistula scabrosa*, Humphrey, M.S.

T. cylindraceo-subpyramidalî, apice decollato; anfractibus 4—7, subventricosis, decussatis, scabris, margine superiori crenulato; suturâ distinctâ; aperturâ ellipticâ, supernè angulatâ, peritremate disjuncto, reflexo, angustiori, umbilico minimo.

Shell rather pyramidally cylindrical, generally decollated at the apex, with from 4 to 7 volutions, (4 when decollated, 7 when entire) rather ventricose, decussated, rough, with their upper edges decollated; suture distinct; aperture elliptical, angular at the upper part; peritreme narrow, reflected, separated from the last volution; umbilicus very small.

From Providence Island and Cuba.

156. *C. CHLOROSTOMA*. (pl. xxviii. f. 168.) *nob.*

T. cylindraceo-pyramidalî, nigricante, apice decollato; anfractibus quinque, ventricosis, decussatis; suturâ distinctâ; aperturâ circulari; peritremate continuo, reflexo-patente, flavo; umbilico minori.

Shell pyramidally cylindrical, decollated at the apex, of a brownish black colour; volutions five, ventricose, decussated, with a distinctly marked suture; aperture circular, with a continuous, reflected, spreading, yellow peritreme; umbilicus small.

From Demerara, G. C. Bainbridge, Esq.

157. *C. OBSCURUM*. (pl. xxviii. f. 169.) *Gray*. M.S.

*T. ventricosus*-subpyramidalis, fuscâ, apice decollato; anfractibus 4, ventricosis, decussatis, subasperis; suturâ crenulatusculâ; apertura circulari; peritremate crasso, reflexo-subpatente, albicante; umbilico minori; operculo laminâ spirali reflexâ.

Shell rather ventricosely pyramidal, fuscous, decollated at the apex, with four ventricose, decussated, rather rough, volutions; suture slightly crenulated; aperture circular, with a thickish, reflected, rather spreading, whitish peritreme; umbilicus small; operculum with a reflected spiral plate.

158. *C. TESSELLATUM*. (pl. xxviii. f. 173.) *nob.*

*T. oblongâ*, pyramidalis, albicante, maculis quadratis brunneis ornatâ; spirâ acuminatâ, ad apicem obtusâ, anfractibus 7, convexis, quinque ultimis longitudinaliter striatis; aperturâ subcirculari, supernè subacuminatâ, peritremate reflexo, tenui, albo, propè anfractum ultimum interrupto, umbilico nullo.

Shell oblong, pyramidal, whitish, with a few squarish brown spots, principally next below the suture; spire acuminate, obtuse at the apex, consisting of seven convex volutions, the five last of which are longitudinally striated; aperture nearly circular, rather acuminate at the upper part, with a thin reflected, sharp edged, white peritreme which is not continuous at that part where the lip comes in contact with the last volution: there is no umbilicus. From Corfu, M. Partsch.

159. *C. PATULUM*. (pl. xxviii. f. 170.) *Draparnaud*, pl. 1. f. 9, 10. *Lam. Anim. vert. vi. 2. p. 149.*

*T. turrito-conicâ*, cinerascens-fuscâ, apice obtusiusculo; anfractibus 7, oblique striatis; suturâ distinctâ; aperturâ subellipticâ, supernè subacuminatâ; peritremate albicante, extus reflexo-patente; umbilico minimo.

Shell turrito-conical, greyish brown, sometimes speckled a little with darker brown; apex somewhat obtuse; volutions seven, obliquely striated, with a distinct suture; aperture rather elliptical, slightly acuminate at the upper part; peritreme whitish, its outer edge reflected, spreading; umbilicus very small. Found according to Lamarck, in the clefts of rocks, near Montpellier, in the South of France.



160. *C. MACULATUM*. (pl. xxviii. f. 171.) *Draparnaud*.

*T.* turrito-conicâ, cinerascens, fusco-maculatâ, apice obtusiusculo, anfractibus 7—8, rotundatis, transversim tenuitè striatis; suturâ distinctâ; aperturâ subellipticâ, supernè subacuminatâ, peritremate extûs incrassato, patulo, margine acuto; umbilico minimo.

Shell turrito-conical, greyish, spotted with fuscous, apex rather obtuse; volutions from seven to eight, rounded, with slender transverse striæ; suture distinct; aperture rather elliptical, oblique, its upper part somewhat acuminate; peritreme white, its outer part thickened and spreading, not reflected, with a sharp edge; umbilicus very small.

It is found in the South of Europe.

161. *C. STRIOLATUM*. (pl. xxxi. f. 286.) *Par*.

*T.* acuminato-pyramidal, tenui, subfuscâ, fasciis interruptis fuscis; anfractibus  $7\frac{1}{2}$ , subrotundatis, transversim obliquè tenerrimè striatis; aperturâ subcirculari, posticè subangulatâ, peritremate tenui, reflexo; umbilico parvo.

Shell acuminate, pyramidal, thin, light brown with interrupted brown bands; volutions  $7\frac{1}{2}$ , slightly rounded, with transverse, oblique, very delicate striæ; aperture nearly circular, rather angular posteriorly; peritreme thin, reflected; umbilicus small. European, sent to Mr. Cuming by M. Parreys.

162. *C. AURITUM*. (pl. xxviii. f. 172.) *Ziegler*. *C. excisilabrum*, nonnull.

*T.* turrito-pyramidal, cinerascens, anfractibus 8, ventricosus, transversim tenuitè striatis, superioribus costellatis, costellis rariusculis; aperturâ ellipticâ, obliquâ, supernè subacuminatâ, peritremate albicante, patente, tenui, latere umbilicali marginato; umbilico tecto; operculi anfractibus paucis obliquè striatis.

Shell turrito-pyramidal, ash grey, volutions 8, ventricose, with close-set, slender, transverse striæ, upper volutions with rather distant ribs; aperture elliptical, oblique, somewhat acuminate at the upper part, with a whitish, spreading, thin peritreme, which is notched on the umbilical side; the umbilicus is covered; operculum of few volutions, which are obliquely striated. From Albania, Hungary, and Transylvania.

163. *C. CRENULATUM*. (pl. xxviii. f. 174. 175.) *Gray*. *M.S.*

*T.* turrito-pyramidal, pallidâ, fusco-maculatâ, apice decollato; anfractibus 4, ventricosiusculis, transversim striatis; suturâ crenulatâ; aperturâ subobliquâ, ellipticâ, supernè

subacuminatâ, peritremate reflexo-patente, supernè acuminato, latere umbilicali flexuoso, sinuato; umbilico parvo.

Shell of a turreted pyramidal form, of a pale colour, with brown spots arranged in four rows; apex decollated; volutions 4, rather ventricose and transversely striated; suture crenulated; aperture rather oblique, somewhat elliptical, and acuminated at the upper extremity; peritreme slightly reflected, spreading, acuminated above, flexuous and sinuated on the umbilical side; umbilicus small. From the Antilles.

164. *C. FASCIA*. (pl. xxviii. f. 176. 177.) *Gray* in Wood's Supp. to Ind. Testac. t. 6. f. 8.

*T. turrito-pyramidali, pallidâ, fusco-fasciatâ, fasciis nonnunquàm variè interruptis; apice plerumque decollato; anfractibus 4—6, ventricosiusculis, plerumque decussato-striatis; suturâ crenulatâ; aperturâ subobliquâ, ellipticâ, supernè subacuminatâ, peritremate duplici, interno simplici, externo variabile, reflexo-patente, supernè acuminato, latere umbilicali flexuoso, sinuato; umbilico minori; operculo spirali, anfractibus paucis, obliquè striatis.*

Shell of a turreted pyramidal form, and generally of a pale colour, with brown bands, which are sometimes variously interrupted; apex generally decollated; volutions from 4 to 6, rather ventricose, and generally decussato-striated, though sometimes striated only transversely; suture crenulated; aperture rather oblique, somewhat elliptical and acuminated at the upper extremity; inner peritreme simple, entire, outer slightly reflected, spreading, acuminated above, flexuous and sinuated on the umbilical side; umbilicus small; operculum with few volutions, increasing rapidly in width, and obliquely striated.

West Indies

165. *C. QUATERNATUM*. (pl. xxviii. f. 178. 179.) *Lam. Anim. sans vert. vi. pt. 2. p. 147.*

*T. oblongo-subcylindraceâ, tenui, apice decollato, anfractibus 4, convexis, spiraliter tenuissimè striatis; suturâ crenulatâ; aperturâ ellipticâ, supernè anguliferâ, peritremate continuo, disjuncto, angusto, reflexo; umbilico minimo, spiralitèr striato.*

Shell oblong, somewhat cylindrical, thin, pellucid, its apex decollated, with 4 finely spirally striated, convex volutions; suture crenulated; aperture elliptical, angular at the upper part, with a narrow, reflected, continuous peritreme, separated from the last volution; umbilicus very small, with a few spiral striæ.

Africa.

166. *C. SAGRA*. (pl. xxxi. f. 279, 280.) *D'Orb. C. Mahogani*, Gould; *C. pictum*, Pfeiffer.

*T. oblongâ*, tenui, pellucidâ, nitidâ, spiraliter striatâ, pallidâ, maculis punctisque numerosis seriatim dispositis ornatâ; apice decollato; anfractibus 3—4, subventricosus; aperturâ ellipticâ; posticè subacuminatâ, peritremate subincrassato, subreflexo; umbilico parvo; operculi anfractibus duobus.

Shell oblong, thin, pellucid, shining, spirally striated, pale, with numerous brown dots disposed in rows; apex decollated; volutions 3—4, rather ventricose; aperture elliptical, slightly acuminate posteriorly; peritreme rather thickened and slightly reflected; umbilicus small; operculum with two volutions.

Cuba, communicated by D'Orbigny, Gould and Pfeiffer.

167. *C. CROCEUM*. (pl. xxix. f. 190, 191.) *nob.*

*T. oblongâ*, ventricosopyramidal, crassiusculâ, glabrâ, croceâ, versus apicem in aurantiaco-fuscam exeunte; spirâ acuminatâ, apice obtusiusculo; anfractibus 7—8, subventricosus, obliquè substriatis; aperturâ ovali, posticè acuminatâ, peritremate interno angusto, fulvo; externo incrassato, albo; umbilico parvo.

Shell oblong, rather ventricosely pyramidal, thickish, smooth, saffron coloured passing into orange brown toward the apex; spire acuminate, obtuse at the apex, volutions 7—8, rather ventricose, indistinctly striated obliquely; aperture oval, posteriorly acuminate, inner peritreme narrow, fulvous; outer thick, white; umbilicus small. Locality unknown; in Mr. Stainforth's collection.

168. *C. ANTILLARUM*. (pl. xxviii. f. 180.) *nob.*

*T. turritâ*, apice obtusiusculo; anfractibus 8, rotundatis, longitudinaliter striatis, epidermide corneâ instructâ; suturâ distinctâ; aperturâ circulari, peritremate reflexo-patente, albicante, supernè submucronato, latere umbilicali latè emarginato; umbilico parvo, margine elevato, crenulato; operculo circulari, spirali, corneo, anfractibus confertis.

Shell turreted, with a rather obtuse apex, volutions eight, rounded, longitudinally striated, covered with a brown horny epidermis; suture distinctly marked; aperture circular; peritreme narrow, reflected, spreading, whitish, with a projecting point at the upper part, and a broad emargination on the umbilical side; umbilicus small, with an elevated and crenulated margin; operculum circular, spiral, horny, with close-set volutions.

From Tortola.

169. *C. TORTUM*. (pl. xxviii. f. 181, 182.) *Gray*, in *Supp.* to *Wood's Index Testaceologicus*. t. 6. f. 32.

*T.* oblongo-ovali, crassiusculâ, lævi, apice decollato; anfractibus 5—6, rotundatis, raptim crescentibus, substriatis; aperturâ circulari; peritremate incrassato, reflexo, latere anfractûs ultimi tenuiori; umbilico parvo.

Shell of an oblong oval shape, thickish, smooth, with a decollated apex; volutions from five to six, rounded, rapidly increasing in width, slightly striated; aperture circular, peritreme thickened, reflected, thinner on the side next to the last volution; umbilicus small.

West Indies.

170. *C. VENTRICOSUM*. (pl. xxviii. f. 183—184.) *D'Orb.*

*T.* oblongo-ovali, crassâ, lævi, apice decollato, anfractibus quinque rotundatis, rapidè crescentibus, transversim tenerimè striatis, penultimo maximo; aperturâ circulari, peritremate incrassato, reflexo, latere anfractûs ultimi angustiori, posticè angulato, latere umbilicali subexpanso; umbilici parvi margine externo obtusè angulato; operculo multispirali, margine anfractuum sublamellari.

Shell of an oblong-oval shape, thick, smooth, decollated when full grown, with five somewhat rounded volutions, increasing rapidly and very finely transversely striated; the last but one being the largest; aperture circular, with a thickened and reflected peritreme, narrower on the side of the last volution; angular posteriorly and with the umbilical side rather spread: umbilicus small, its external margin obtusely angular; operculum multispiral, with the edge of its volutions slightly lamellar.

Cuba, D'Orbigny.

171. *C. AURICULATUM*. *D'Orb.* (pl. xxxi. f. 277.) *C. bicolor* Gould.

*T.* oblongo-pyramidal, ventricosiusculâ, crassâ, spiræ apice obtuso, anfractibus 4—6, subrotundatis, primis pallescentibus, duobus ultimis castaneis, transversim, subundulatim, striatis; aperturâ circulari, peritremate externo incrassato, reflexo, posticè in angulum obtusum desinente, deinde, umbilicum versus tenui, demùm suprâ umbilicum lamellari patente; umbilico mediocri, margine obtusè angulato.

Shell oblong, pyramidal, rather ventricose, thick; apex of the spire obtuse; volutions 4—6, rather rounded, the first 2—3 pale, and the two last chesnut coloured, with slightly undulated transverse striæ; aperture circular, outer peritreme thickened, reflected, passing off into an obtuse angle posteriorly, then thin toward the umbilicus, and at length somewhat



lamellar, and spreading over the umbilicus, which is middling and with an obtuse angular margin.

Cuba, D'Orbigny and Gould.

172. *C. TORTUOSUM*. (pl. xxviii. f. 185. 186.) Turbo tortuosus, *Chemn.* xi. t. 195, A. f. 1882. 1883.

T. oblongâ, pupiforme, albâ, tenui, lucidâ; anfractibus 7, rotundatis, obsoletissimè striatis, ultimo compressiusculo, prope aperturam subcoarctato, exserto; suturâ distinctâ; aperturâ circulari; peritremate continuo, reflexo, infra internè canaliculato; umbilico parvo, carinato, carinâ usque ad marginem peritrematis continuâ.

Shell oblong, pupiform, white, thin, shining, with 7 rounded volutions, which are obsoletely striated, the last of them somewhat compressed, and slightly contracted near the aperture, exserted; suture distinct; aperture circular; peritreme continuous, reflected, with a small canal internally at the lower part; umbilicus small, surrounded by a keel which continues to the lower margin of the peritreme. From the Nicobar Isles, *Chemn.*

173. *C. ALTUM*. (pl. xxviii. f. 187.) *nob.*

T. acuminato-turritâ, crassiusculâ, fuscâ, lævi, tenuissime striatâ, apice obtusiusculo; anfractibus 7—8, subrotundatis, suturâ distinctâ, tenui; aperturâ circulari, labio subincrassato, reflexo patente, duplici, margine externo magis expanso, intus canali parvâ ad basin columellarem munito; umbilico mediocri extus carinâ obtusâ marginato; operculo corneo, tenui, multispirali.

Shell rather acuminate, turreted, thickish, dark brown, smooth, very finely striated; apex rather obtuse; volutions 7 or 8, somewhat rounded, with a distinct slender suture; aperture nearly circular, the lip rather thickened, reflected, double, the outer margin more spread than the inner, furnished with a small canal within at the base of the columella; umbilicus moderate, bordered externally by a small obtuse keel; operculum horny, thin, multispiral. On trunks of trees, in the mountains of the Isle of Negros. H. Cuming.

174. *C. PUPINIFORME* (pl. xxviii. f. 188.) *nob.*

T. subcylindrico-turritâ, crassiusculâ, obscurâ, fuscâ, lævi, tenuissimè striatâ, apice subabruptè acuminato; anfractibus 6, subrotundatis, suturâ validâ; aperturâ circulari, peritremate discontinuo; labio externo subincrassato, revoluti, flavido, ad basin columellarem canali angustissimâ spirali interrupto; deinde supernè latiori, demum suprâ ultimum

anfractum levitè expanso; umbilico parvo, carinâ obtusâ marginato, hâcce carinâ externam partem canalis angustissimi ad basin columellæ efformante.

Shell subcylindrical, turreted, rather thick, smooth, dull, brown, very finely striated; apex rather abruptly acuminate; volutions 6, rather rounded, with a well marked suture; aperture circular, peritreme discontinuous; outer lip thickened, reflected, yellowish, interrupted with a very narrow spiral canal at the base of the columella, then rather broader, and at length thinly spread over a part of the last volution; umbilicus small, bordered with an obtuse keel, which forms the outside of the very narrow canal at the base of the columella. Found upon trunks of trees, near St. Juan, in the Island of Luçon, by Mr. Cuming.

175. *C. MINUS*. (pl. xxx. f. 249.) *nob.*

*T.* ovato-oblongâ, cylindraceâ, tenui, hyalinâ, lævi, spirâ obtusâ, apice quasi truncatâ; anfractibus 4—5, ventricosis, primis duobus ad 3, minimis, transversim costellatis; aperturâ circulari, peritremate reflexo; umbilico nullo.

Shell ovate-oblong, cylindrical, thin, hyaline, smooth, shining, spire obtuse, with its apex, as it were, truncated; volutions 4—5, ventricose, the first 2—3 very small, transversely costellated; aperture circular, peritreme reflected, umbilicus none. Found under decayed leaves in the Islands of Zebu and Panay, by Mr. Cuming.

## CYCLOSTOMA.

## LIST OF PLATES XXIII to XXXI.

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DESCRIPTIONS OF SOME ADDITIONAL SPECIES OF  
THE GENUS CYCLOSTOMA.

FIGURED IN SUPPLEMENTARY PLATES XXXI. *A.* and XXXI. *B.*

176. *CYCLOSTOMA ZEBRINUM* (Tab. Suppl. xxxi. *a*, f. 287, 288), *Benson*. *Cyclostoma zebrinum*, *Benson*, Journ. of Asiatic Soc. of Calcutta, 1836, vol. v. p. 355.

*C.* testâ suborbiculari, albidâ, strigis pluribus rufo-castaneis, angulato-flexuosis pictâ; spirâ subdepresso-conicâ, subacuminatâ; anfractibus quatuor, carinatis, plicis paucis transversalibus distantibus, ultimo rugis undulatis longitudinalibus sculptis; suturâ distinctâ; aperturâ circulari, peritremate incrassato, albo, reflexo; umbilico medioeri; epidermide crassâ, fuscâ, plicis longitudinalibus, his setis fortibus munitis, instructâ.

A rather thin shell, of a pale colour, varied with reddish chestnut angular streaks and lines, and with a thick fuscous epidermis, covered with longitudinal folds, which are furnished with strong bristles; spire rather depressed, conical, and somewhat acuminate; volutions four, carinated and irregularly spirally striated, irregular obsolete ridges on the last volution, few, distant; suture distinct; aperture circular, with a thickened, white, reflected peritreme; umbilicus of moderate size.

India. *Benson*.

From *C. perdia* it differs in its sculpture, its more developed keel, more contracted umbilical cavity, and in its possession of a singular epidermis. In *C. perdia* the marks are white, mottled on a chestnut ground; in *C. zebrinum* they consist of distant zigzag flames of light chestnut on a white ground.

177. *CYCLOSTOMA MADAGASCARIENSE* (Tab. Suppl. xxxi. *a*, f. 289), *Gray*.

*C.* testâ globoso-conoidali, albicante, fusco spiraliter lineatâ et fasciatâ; spirâ subacuminatâ; anfractibus rotundatis, lævibus, ultimo ventricoso, subcarinato, carinâ albâ; aperturâ circulari, intus castaneâ; peritremate pallidè aurantiaco, lato, extûs expanso, supra umbilicum subrevoluto; umbilico majusculo, spiraliter sulcato.

Shell of a conical globose form, whitish, with spiral fuscous

lines and bands ; spire somewhat acuminate, whorls five to six, rounded, smooth, the last ventricose, slightly carinated, carina white ; aperture circular, chestnut-coloured within ; peritreme pale orange-coloured, broad, spreading outwards, somewhat reflected over the umbilicus, which is rather large and spirally grooved within.

Our figure 125, which we have given as a variety of *C. obsoletum*, should rather have been given as *C. Madagascariense*, var., Gray, and the synonym under *C. obsoletum* should be omitted. The operculum is testaceous and of few volutions.

Madagascar.

178. CYCLOSTOMA SIAMENSE (Tab. Suppl. xxxi. a, f. 292, 293), *nobis*.

C. testâ depresso-subglobosâ, albidâ, strigis maculisque castaneis angulariter flexuosis pictâ ; spirâ subdepresso-conicâ, subacuminatâ ; anfractibus  $3\frac{1}{2}$ , rotundatis, ultimo maximo, ventricoso ; suturâ distinctâ, tenui ; aperturâ circulari, maximâ, intus albâ ; peritremate incrassato, pallidè aurantiaco, rotundato, reflexo ; umbilico majusculo.

Shell of a somewhat depressed globose form, whitish with angular markings and streaks of a chestnut-colour ; spire somewhat depressed, conical, slightly acuminate ; whorls  $3\frac{1}{2}$ , rounded, the last very large, ventricose, with a distinct linear suture ; aperture very large, circular, white within ; peritreme thickened, of a pale orange-colour, rounded and reflected ; umbilicus rather large. The entire surface of the shell is covered with very minute granules, irregularly arranged in spiral rows.

Siam.

179. CYCLOSTOMA XANTHOCHEILUS (Tab. Suppl. xxxi. a, f. 294, 295), *nobis*.

C. testâ conico-subglobosâ, lævi, aurantiaco-brunneâ, fusco uni- vel bifasciatâ ; spirâ subelevato-conicâ, obtusiusculâ ; anfractibus quinque, rotundatis, primis unifasciatis, ultimo pallidè bifasciato ; suturâ distinctâ ; aperturâ circulari, intus purpureo-nigricante ; peritremate aurantiaco, subincrassato, reflexo, posticè subexpanso, supra umbilicum revoluta ; umbilico parvo ; operculo subtestaceo, paucispirali.

Shell somewhat conical, globose, smooth, orange-brown, with one or two fuscous spiral bands ; spire rather elevated, conical, slightly obtuse ; volutions five, rounded, the posterior having one

band, the last two pale bands ; aperture circular, dark purplish-black within ; peritreme brownish orange-coloured, rather thickened, reflected, slightly spreading posteriorly, and somewhat revolute over the umbilicus, which is small ; operculum externally testaceous, internally horny, of few volutions.

Madagascar. *Mus. Cuming.*

180. *CYCLOSTOMA ZONULATUM* (Tab. Suppl. xxxi. a, f. 296, 297), *Férussac*, MS.

C. testâ globoso-conicâ, albicante, fusco-zonulatâ ; spirâ levato-conicâ, acuminatâ, apice obtusiusculo ; anfractibus quinque, rotundatis, posticè carinis quatuor ad quinque tenuibus, anticè striis validis instructis ; suturâ distinctâ ; aperturâ circulari, peritremate lato, albo, extûs expanso, intûs supra umbilicum posticè revoluta, anticè angustato ; umbilico parvo, striis nonnullis validis instructo ; operculo testaceo, paucispirali.

Shell globose-conical, whitish, girdled anteriorly with narrow fuscous zones ; spire elevated, conical, acuminated ; its apex rather obtuse ; volutions five, rounded, posteriorly with from four to five slender keels, and anteriorly with well-marked striæ ; suture distinct ; aperture circular ; peritreme white, broad, spreading outwards, and posteriorly revolute over the umbilicus on the columellar side ; umbilicus small, spirally grooved within ; operculum testaceous, of few volutions, white.

*Mus. Cuming.*

181. *CYCLOSTOMA LAXATUM* (Tab. Suppl. xxxi. a, f. 302), *nobis*.

C. testâ orbiculari-depressâ, albidâ, epidermide aurantiaco-brunneâ indutâ ; spirâ depressâ, apice rufescente ; anfractibus quatuor, rotundatis, rugulosis, ultimo zonis duabus, alterâ albidâ, alterâ fuscâ, striis incrementi validis ; aperturâ subdepresso-circulari, posticè prope ultimum anfractum paulisper angulatâ ; peritremate tenui, anticè paululum reflexo ; umbilico maximo, anfractibus quatuor conspicuis.

Shell of a depressed orbicular form, whitish, covered with a thick orange-brown epidermis ; spire depressed, with a rufous apex ; volutions four, rounded, covered not only with distinct lines of growth, but also with irregular rugulosities, with two narrow zones, the posterior white, the other fuscous, in front of which the epidermis is more darkly coloured ; aperture not quite circular, but very slightly elliptical, and with a slight angle pos-



teriorly close to the last volution ; peritreme thin, anteriorly very slightly reflected ; umbilicus very large, showing internally the four volutions.

The shell is somewhat diaphanous, so that the white and dark-brown zones are distinctly seen within the aperture.

Columbia. *Mus. Cuming.*

182. *CYCLOSTOMA TEXTURATUM* (Tab. Suppl. xxxi. a, f. 303), *nobis.*

C. testâ depresso-suborbiculari, albidâ, epidermide crassiusculâ olivaceo-brunneâ indutâ ; spirâ brevissimâ, obtusâ, anfractibus quinque, rotundatis, irregulariter rugulosis seu sulcis irregularibus undulatis circumdatis ; suturâ distinctâ ; aperturâ ferè circulari, posticè prope anfractum ultimum subangulari, intùs albicante ; peritremate tenui ; umbilico maximo.

Shell suborbicular, depressed, whitish, coated with a thickish olive-brown epidermis ; spire very short, obtuse ; volutions five, rounded, entirely covered with irregular undulated grooves, giving it somewhat the appearance of being woven ; suture distinct ; aperture nearly circular, slightly angular posteriorly close to the last volution, whitish within ; peritreme thin ; umbilicus very large.

From the Province of Guatemala, Central America. *Cuming.*

183. *CYCLOSTOMA INCOMPTUM* (Tab. Suppl. xxxi. a, f. 298, 299), *nobis.*

C. testâ depresso-suborbiculari, albâ, epidermide olivaceo-brunneâ indutâ ; spirâ brevi, obtusâ ; anfractibus  $4\frac{1}{2}$ , rotundatis, obliquè lineis incrementi validis striatis ; suturâ distinctâ ; aperturâ ferè circulari, posticè prope ultimum anfractum sinuatâ, extùs tuberculam fornicatam formante ; peritremate anticè incrassatâ ; umbilico magno.

Shell suborbicular, depressed, white, covered with an olive-brown epidermis ; spire short, obtuse ; volutions  $4\frac{1}{2}$ , rounded, obliquely striated by the strongly marked lines of growth ; suture distinct ; aperture nearly circular, with a sinus posteriorly close to the last volution, forming a vaulted tubercle externally ; peritreme thin, a little thickened in front ; umbilicus very large.

This is one of the genus *Pterocyclos*, of Benson ; we do not know its locality, but suppose it to be Indian. It is in Mr. Cuming's Collection.

184. *CYCLOSTOMA SUBDISCOIDEUM* (Tab. Suppl. xxxi. *b*, f. 304, 305), *nobis*.

C. testâ suborbiculari, subdiscoideâ, spiraliter lirâtâ, albicante, zonâ interruptâ, pallidè fuscâ, ornatâ; spirâ depresso-conicâ, obtusâ; anfractibus quatuor, rotundatis; suturâ subcanaliculatâ; aperturâ circulari; peritremate tenui, albido, paululùm reflexo; umbilico maximo, anfractibus quatuor distinctis.

Shell suborbicular, rather discoid, spirally grooved, whitish, with an interrupted zone of a pale brownish colour; spire depressedly conical, obtuse; volutions four, rounded; suture very slightly channeled; aperture circular; peritreme thin, whitish, slightly reflected, and spreading a little posteriorly over the last volution; umbilicus very large, showing the four volutions within.

185. *CYCLOSTOMA DEPRESSUM* (Tab. Suppl. xxxi. *b*, f. 306, 307), *nobis*.

C. testâ suborbiculari, albidâ; spirâ depressâ, apice prominulo, obtuso; anfractibus quatuor, rotundatis, lævibus, supernè spiraliter striatis, medianè subcarinatis; suturâ distinctâ; aperturâ ferè circulari, peritremate tenui, subreflexo, supra ultimum anfractum paululùm extenso; umbilico maximo, intus lævi.

Shell suborbicular, whitish, slightly clouded with very pale brown; spire depressed, its apex somewhat prominent, obtuse; volutions four, rounded, smooth, their upper half spirally striated, slightly keeled near the middle; suture distinct; aperture nearly circular, with a thin, white, slightly reflected peritreme, which is slightly extended over the last volution; umbilicus very large; smooth inside.

Nearest to *C. Lithidion*, but easily distinguished by its flat spire with an elevated apex.

186. *CYCLOSTOMA SUBRUGOSUM* (Tab. Suppl. xxxi. *b*, f. 308, 309), *nobis*.

C. testâ suborbiculari, depressâ, rugulosâ, albâ; spira depressâ, obtusâ, apice prominulo; anfractibus quatuor, rotundatis, posticè depressiusculis; suturâ distinctâ, lineâ obsoletâ subsuturali notatâ; aperturâ ferè circulari; peritremate posticè subincrassato, intus prope umbilicum tenui, ab ultimum anfractum disjuncto; umbilico magno, anticè carinato.

Shell suborbicular, depressed, slightly corrugated, white; spire

depressed, obtuse, slightly prominent at the apex ; volutions four, rounded, slightly depressed posteriorly ; suture distinct, marked with a nearly obsolete line in front ; aperture nearly circular ; peritreme slightly thickened posteriorly, thin on the side of the umbilicus, separated from the last volution ; umbilicus large, anteriorly keeled.

This species is related to *C. corrugatum*.  
Jamaica.

187. *CYCLOSTOMA VOLVULOIDES* (Tab. Suppl. xxxi. *b*, f. 312, 313), *nobis*.

*C. testâ subgloboso-conicâ, pallidâ, pallidè fulvescente zonatâ et sphacelatâ ; spirâ subacuminatâ, apice obtusiusculo ; anfractibus quinque, rotundatis, raptim majoribus, posticè spiraliter liratis, anticè lævigatis ; suturâ distinctâ ; aperturâ ferè circulari, supernè subcanaliferâ, peritremate albo, subincrassato, reflexo, prope umbilicum tenui, anticè extenso ; gulâ subaurantiacâ ; umbilico magno, intùs spiraliter striato.*

Shell somewhat globosely conical, of a light colour, with pale brownish bands and marks ; spire slightly acuminate, with its apex rather obtuse ; volutions five, rounded, increasing rapidly in size, posteriorly spirally grooved, anteriorly smooth ; suture distinct ; aperture nearly circular, slightly canaliculate at the upper part ; peritreme white, somewhat thickened, reflected, thin and spreading forward on the side of the umbilicus, which is large and spirally grooved ; the throat is somewhat orange-coloured.

188. *CYCLOSTOMA DELICIOSUM* (Tab. Suppl. xxxi. *b*, f. 314, 315), *Férussac*.

*C. testâ subgloboso-conicâ, aurantiaco-castaneâ, albo-lineatâ ; spirâ subacuminatâ, apice obtusiusculo ; anfractibus  $4\frac{1}{2}$ , rotundatis, posticis unicarinatis, ultimo bi- vel tricarinato, carinis albis ; suturâ subinconspicuâ, albicante ; aperturâ ferè circulari, supernè subcanaliferâ, peritremate tenuiusculo, reflexo, extùs albicante, intùs castaneo ; umbilico magno, obsoletè spiraliter paucistriato, lineâ albicante unicâ extùs marginato ; operculo crassiusculo, albicante, paucispirali.*

Shell rather globosely conical, of an orange-chestnut colour, with white spiral lines ; spire slightly acuminate, with a rather obtuse apex ; volutions  $4\frac{1}{2}$ , rounded, the first with a single keel, the last with two or three keels, which are white ; suture rather indistinct, white ; aperture nearly circular, with a very slight

canal posteriorly ; peritreme rather thin, reflected, outer part whitish, within chestnut-colour ; umbilicus large, with a few somewhat obsolete spiral striæ, and bordered externally with a single white line ; operculum rather thick, whitish, and paucispiral. Madagascar.

189. *CYCLOSTOMA GUAYAQUILENSE* (Tab. Suppl. xxxi. *l*, f. 319), *nobis*.

C. testâ subgloboso-depressâ, fulvescente, brunneo spiraliter lineatâ ; spirâ subacuminatâ, brevî, apice obtusiusculo, rufescente ; anfractibus quatuor, rotundatis ; suturâ distinctâ ; aperturâ circulari, peritremate tenuiusculo ; umbilico magno, lævi, lineis incrementis tenerimis solummodò conspicuis.

Shell depressedly subglobose, of a dull fulvous colour, with brown spiral lines ; spire slightly acuminate, short, with a rather obtuse rufous apex ; volutions four, rounded ; suture distinct ; aperture circular ; peritreme thin ; umbilicus large, smooth, only marked with extremely slender lines of growth.

Guayaquil ; *Delattre*. *Mus. Cuming*.

190. *CYCLOSTOMA INDICUM* (Tab. Suppl. xxxi. *l*, f. 320, 321), *Deshayes*, Lam. Anim. sans vert. viii. p. 363.

C. testâ turbinato-conicâ, suborbiculari, subdepressâ, fuscâ, albo-rutilante marmoratâ ; spirâ brevî, subacuminatâ, apice obtuso ; anfractibus  $5\frac{1}{2}$ , convexis, liris spiralibus tribus vel quatuor elevatis, striis tenuioribus interjectis ; ultimo anfractu ad peripheriam zonâ nigrescente cincto ; suturâ distinctâ ; aperturâ circulari, posticè subcanaliferâ, intus albâ, peritremate subincrassato, revoluta, albido, nonnunquam subaurantiaco ; umbilico maximo, margine subcarinato ; operculum tenue, corneum, anfractibus septem ad octo.

Shell of a rather depressed, suborbicular, conical, turbinate form, and of a dark-brown colour, variously mottled with brownish-white ; spire short, slightly acuminate, with an obtuse apex ; volutions  $5\frac{1}{2}$ , convex, with three or four slightly elevated spiral lines, with slender intervening striæ ; last volution with a dark-brown, nearly black zone near the middle ; suture distinct ; aperture circular, with a very slight channel posteriorly, white within ; peritreme thickened, revolute, whitish, somewhat light orange-brown ; umbilicus very large, slightly keeled at the outer edge ; operculum thin, horny, with seven to eight volutions.

Ceylon, *Capt. Templeton*. *Mus. Cuming*. Madras, *Mr. Benson*. Khasya Hills, *Mr. Lear*.



191. *CYCLOSTOMA DESHAYESIANUM* (Tab. Suppl. xxxi. 6, f. 326, 327), *Petit*, Kuster, I. 19. t. 25. f. 8-10. *Cycl. gratum*, *Férussac*, MS.

C. testâ suborbiculari, depressâ, subdiscoideâ, spiraliter lirâtâ, fulvescente; spirâ brevissimâ, obtusâ; anfractibus quatuor, rotundatis, spiraliter liris, posticè plerumque liris acutis, lineis incrementi decussatis, anticè striatis, striis plus minusve validis; suturâ subdistinctâ; aperturâ circulari, intus aurantiacâ, peritremate duplici, interno albo, incrassato, ad ultimum anfractum interrupto, externo lamellari, extenso, latiusculo; umbilico maximo, intus spiraliter striato.

Shell nearly orbicular, depressed, subdiscoid, of a light fulvous colour; spire very short, obtuse; volutions four, rounded, with distinct, elevated, sharp-edged spiral lines, which are decussated by indistinct lines of growth, particularly on the posterior part of the shell; the shell is also spirally striated anteriorly, the striae being more or less prominent; suture rather indistinct; aperture circular, orange-coloured within, with a double peritreme, the inner of which is thick, prominent, and white, and interrupted at its junction with the last volution; the outer is lamellar, broad, and spread out; the umbilicus is very large and internally spirally striated.

In Mr. Cuming's collection are two specimens which appear to belong to two distinct varieties: the one with an indistinct suture and very slender spiral striae anteriorly; the other with a distinct suture and strongly marked spiral lines anteriorly.

192. *CYCLOSTOMA BITUBERCULATUM* (Tab. Suppl. xxxi. a, f. 290, 291), *nobis*.

C. testâ oblongo-pyramidali, ventricosiusculâ, crassâ, albicante, spiræ apice decollato, obtuso; anfractibus quinque, lævibus, transversim subundulatis obsoletè striatis; aperturâ circulari, peritremate externo incrassato, extus revoluta, posticè contra ultimum anfractum in nodulum desinente, deinde umbilicum versus angusto, demum supra umbilicum nodulum alterum formante; umbilico ferè clauso, margine angulato.

Shell oblong, pyramidal, rather ventricose, thick, of a dull whitish colour, apex of the spire decollated, obtuse; volutions five, smooth, with nearly obsolete, slightly undulated, transverse striae; aperture circular, with a light-coloured, very much thickened external peritreme, revolute outwards, posteriorly against the last volution forming a small lobe, then narrow to-

wards the umbilicus, and at length forming another lobe nearly covering the umbilicus, whose margin is angular ; operculum horny, multispiral.

Larger, more solid, and smoother than *C. auriculatum*, and differing from that species in its much thicker, revolute peritreme, forming two distinct lobes, one of which nearly covers the umbilicus.

West Indies. *Mus. Cuming.*

193. *CYCLOSTOMA DECUSSATUM* (Tab. Suppl. xxxi. a, f. 300, 301), *nobis*.

*C. testâ oblongâ, pyramidali, fuscâ seu fusco-nigricante decussatim sulcatâ ; apice decollato ; anfractibus quatuor, rotundatis ; suturâ validâ, crenulatâ ; aperturâ subelliptica, peritremate duplici, interno tenuiusculo, sublevato, externo latiusculo, reflexo, umbilicum parvum subtegente.*

Shell oblong, pyramidal, fuscous or blackish, decussately grooved, with an obtuse decollated apex ; volutions four, rounded ; suture distinct, crenulated ; aperture somewhat elliptical, slightly acuminate posteriorly ; peritreme double, inner narrow, slightly elevated, outer rather wide, reflected, partly covering the small umbilicus.

West Indies. *Mus. Cuming.*

194. *CYCLOSTOMA COPANENSE* (Tab. Suppl. xxxi. b, f. 310, 311), *nobis*.

*C. testâ acuminato-turritâ (plerumque decollatâ), lævi, tenuissimè striatâ, nitidâ, olivaceo-fulvâ ; spirâ elongatâ ; anfractibus sex, rotundatis ; suturâ distinctâ ; aperturâ circulari ; peritremate duplici, interno tenui, angusto, porrecto, ad ultimum anfractum interrupto, externo lato, lamellari, extenso, subinflexo, ad ultimum anfractum porrecto, emarginato, flexuoso ; umbilico mediocri, extûs carinato ; operculo corneo, multispirali, lamelloso, intûs stylo brevi, centrali, margine incrassato.*

Shell acutely turreted (usually decollated), very finely longitudinally striated, but smooth and somewhat shining, of an olivaceous fulvous colour ; the remaining volutions of the lengthened spire after decollation are in general six ; they are rounded, and the suture is distinct ; aperture circular, with a double peritreme, the inner of which is thin, narrow and projected forward, and interrupted at the last volution ; the outer is broad, lamellar, spreading, slightly inflected, and flexuous, notched and projected

forward close to the last volution; the umbilicus is of moderate size, externally carinated; operculum horny, multispiral, lamellar, with a short central point within, and a thickened edge.

Copan, Province of Guatemala in Central America. *Mus. Cuming.*

195. *CYCLOSTOMA FUNICULATUM* (Tab. Suppl. xxxi. *b*, f. 316, 317), *Benson*, Journ. of Asiatic Society, 1838, vol. vii. p. 217.

*C. testâ cylindraceo-turritâ, læviusculâ, nitidâ, olivaceo-fulvâ; spirâ obtusiusculâ; anfractibus septem, subrotundatis, posticis tenerrimè striatis, ultimo ruguloso, posticè striato; suturâ distinctâ, tenui; aperturâ circulari; peritremate incrassato, rotundato-reflexo, subaurantiaco; umbilico parvo, extûs carinâ validâ cælatâ munito.*

Shell of a cylindrically turreted form, smooth, shining, of an olivaceous fulvous colour; spire rather obtuse, with seven slightly rounded volutions, which are very finely striated posteriorly, and the last of which is rather rugulose and posteriorly striated; suture distinct and slender; aperture circular; peritreme thickened, rounded and reflected, of a dull orange-colour; umbilicus small, furnished externally with a distinct embossed carina.

Khasya Hills, India. In Mr. Benson's and Mr. Cuming's Collections.

196. *CYCLOSTOMA PAUPERCULUM* (Tab. Suppl. xxxi. *b*, f. 318), *nobis.*

*C. testâ cylindraceo-turritâ, nitidâ, olivaceo-fulvâ; spirâ obtusiusculâ; anfractibus sex, subrotundatis, tenerrimè lineis incrementi striatis (erosione nonnunquam rugulosis); suturâ distinctâ, profundiusculâ; aperturâ ferè circulari; peritremate subincrassato, rotundato-reflexo, prope ultimum anfractum subfoliaceo, subinterrupto; umbilico parvo, lineâ subobsoletâ circumambiente.*

Shell small, cylindrically turreted, shining, of an olivaceous-fulvous colour; spire rather obtuse, with six slightly rounded volutions, very finely striated with the lines of growth (sometimes rendered slightly rugulose by erosion); suture distinct, rather deep; aperture nearly circular; peritreme slightly thickened, rounded, and reflected, very slightly foliaceous and interrupted at the last volution; umbilicus small, surrounded by a somewhat obsolete raised line.

Bootan. *Benson.*

197. *CYCLOSTOMA LIMA* (Tab. Suppl. xxxi. *l*, f. 324, 325),  
*Adams*.

*C. testâ oblongo-pyramidali, decollatâ, fuscâ; anfractibus quatuor, teretibus, confertim decussato-striatis, asperrimis; suturâ latâ, profundâ; aperturâ circulari; peritremate dilatato, latè expanso, lamellari, supernè latiori; umbilico majusculo, spiraliter tricarinato; operculo testaceo; lamellâ externâ spirali, reflexâ, striatâ.*

Shell oblong, pyramidal, decollated, brown; volutions four, rounded, very rough with close-set decussated striae; suture broad and deep; aperture circular, peritreme dilated, broadly expanded, lamellar, broader superiorly; umbilicus rather large, with three spiral keels; operculum shelly, with an externally reflected spiral lamella.

Jamaica.

198. *CYCLOSTOMA BIFASCIATUM* (Tab. Suppl. xxxi. *l*, f. 322, 323), *nobis*.

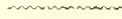
*C. testâ oblongâ, acuminato-turritâ, pallidâ; anfractibus septem, rotundatis, lævibus, ultimo fusco-bifasciato; suturâ distinctâ; aperturâ subcirculari, supernè acuminatâ; peritremate duplici, incrassato, externo incrassato, reflexo, interno tenui, angusto; umbilico parvo.*

An oblong, acuminately turreted shell, of a pale colour, with seven smooth, rounded volutions, the last of which has two brown bands; suture distinct; aperture nearly circular, acuminate superiorly; peritreme thickened, double, the outer being thickened and reflected, and the inner thin and narrow; umbilicus small.

Found near Guayaquil, by M. Delattre.



## CYCLOSTOMA.



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## MONOGRAPH OF THE GENUS

### SCALARIA.

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*Char. Gen.* Molluscum marinum trachelipodum: testâ spirali, pyramidali; varicibus concentricis; aperturâ sub-rotundata; margine crasso, integro: operculo corneo paucispirali.

A genus of marine trachelipodous mollusca, with a spiral shell of a more or less pyramidal form, and a flat, horny operculum with a few spiral turns. The edges of the aperture are outwardly thickened at various periods of growth, forming external ribs or varices. The aperture is rounded or oval, with a thickened, entire margin.

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#### DESCRIPTION.

1. *Sc. PRETIOSA*. pl. xxxii. f. 17.) *Lam.* Turbo Scaaris, Linn.

*T.* ventricosâ, lævi; latè perforatâ; anfractibus separatis, rotundatis; varicibus 11—13 distantibus, subcrenulatis, laminatis, extantibus, paululum recurvis; aperturâ magnâ, ovali, anticè sub-quadratâ: colore inter varices pallidè fulvo-purpurascente, aperturâ internè fulvâ.

*Obs.* This is the well known "Wentletrap," which although more frequently met with now than formerly, is still an object of value when in good condition; and strikes even the uninitiated observer with the unrivalled beauty of its sculpture. China.

2. *Sc. PALLASSII*. (pl. xxxii. f. 14, 15, 16.) *Keiner*, Turbo Principalis, *Pallas* (ut dicunt auctores nonnulli) var. f. 14. *Sc. nicobarica*, *Beck*; M.S.

*T.* sub-ventricosâ, lævi, perforatâ; anfractibus sub-rotundatis; varicibus extantibus, laminatis, ad angulum posticum in dentem acutum productis; ad suturam junctis: aperturâ

ovali-subquadratâ; labio interno anticè extenso: colore, inter varices albas, fulvo vel castaneo.

More narrow and pyramidal than *Sc. pretiosa*, with the whorls closer, the ribs more numerous, with a small tooth-like process at the upper angle of each.

Catanuan, Philippines.

3. *SC. ALATA*. (pl. xxxii. f. 10, 11.) *Sow. Jun.*, var. f. 14. Isl. Nicobar. *Zool. Proc.* 1844.

T. sub-ventricosâ, lævi, umbilicatâ; anfractibus separatis; varicibus 8, latis, distantibus, laminatis, latè extantibus, supernè angulatis: aperturâ ovali, marginè sub-quadratâ: colore, inter varices, in medio anfractuum, fulvo vel castaneo nigricante.

Brought by Mr. Cuming from Catanuan, Isl. Luzon, Philippines. See observations on *Sc. replicata*.

4. *SC. FASCIATA*. (pl. xxxii, f. 12, 13.) *Sow. Jun.*, *Zool. Proc.* 1844.

T. *Sc. alatae* similimâ, sed varicibus angustioribus, angulo magis elevato, acuto: aperturâ minori, margine acuminato.

Also from Catanuan, Isl. Luzon, Philippines, by Mr. Cuming, see *Sc. replicata*.

5. *SC. MARMORATA*. (pl. xxxii. f. 9.) *Sow. Jun.*, *Zool. Proc.* 1844.

T. *Sc. alatae* similimâ, sed varicibus obtusè angulatis: colore, inter varices, fusco marmorato.

From India, Mr. Cuming's collection, see *Sc. replicata*.

6. *SC. REPLICATA*. (pl. xxxii. f. 23, 24.) *Sow. Jun.*, *Zool. Proc.* 1844.

T. sub ventricosâ, brevi, lævi; anfractibus separatis: varicibus 8, distantibus, laminatis, validè replicatis, supernè elevatim angulatis, ad suturam junctis: colore albo.

This species, and the three preceding, have an affinity with each other; each has the whorls disunited, with broad laminated, angulated, distant varices, which are united at the suture; those of *Sc. alata*, are flat and broad, the angle of each varix, is at some distance from the suture; those of *Sc. fasciata*, have the angle much sharper, and higher in the whorl, and the shell is, altogether, more pyramidal: a similar form is observed in *Sc. marmorata*; but in this, the angle of the varices is very obtuse, and as low as that of *alata*, the varices are also much narrower, and slightly reflected; the shell is beautifully marbled with brown between the varices.

*Sc. replicata*, brought by Mr. Cuming from Lord Hood's Island, is a short white shell, with a very acute angle on the upper part of each varix, near the suture. The varices are strongly folded back, so as to form a canal behind each.

7. *Sc. HYALINA*. (pl. xxxii. f. 21, 22.) *Sow. Jun., Zool. Proc.* 1844.

*T. tenui*, glabrâ; anfractibus latè separatîs, angustis; varicibus 6, distantibus, lacqueatis, extantibus; colore albo.

This elegant little species has the whorls quite distinct from each other, not even united by the varices; which are distant, laminated, and beautifully fluted. Brought by Mr. Cuming from Catanuan, Isl. Luzon, Philippines.

8. *Sc. LAXATA*. (pl. xxxii, f. 8.) *Sow. Jun., Zool. Proc.* 1844.

*T. tenui*, lævi; anfractibus validè separatîs: varicibus numerosis, sub-regularibus, laminatis, simplicibus; aperturâ ovali: colore albo.

The whorls are separated, as in *Sc. hyalina*, but the varices are very numerous and simple. Brought from Catanuan, Isl. Luzon, Philippines, by Mr. Cuming.

9. *Sc. PYRAMIDALIS*. (pl. xxxii. f. 4.) *Sow. Jun., Zool. Proc.* 1844.

*T. pyramidalî*, acuminatâ, lævi: anfractibus separatîs varicibus 9, extantibus, sub-crenulatis, prope suturam in angulum acutum productis, ad suturam junctis; aperturâ ovali; labio interno crasso: colore albo.

In some respects, resembling *Sc. communis*, but much less elongated, and with laminated, projecting varices, which have a sharp angle near the suture.

Brought from Isl. Camanguing, Philippines, by Mr. Cuming; we are also indebted to the Rev. J. F. Stainforth, for the complete specimen, which we have figured.

10. *Sc. COMMUNIS*. (pl. xxxii. f. 18, 19, 20, 27, 28.) *Lam. Turbo clathrus*, Gmel.

*T. elongatâ*, lævi; anfractibus numerosis, paululùm separatîs: varicibus crassis, reflexis, sub-equalibus, sub-recumbentibus, ad suturam plicatim junctis, colore purpureo fuscoque maculato et fasciato, vel griseo, vel albo.

There is no reason for supposing, as Gmelin, Dillwyn, and other authors have done, that Linneus had his eye upon this common British species, when describing his *Turbo clathrus*.

Great Britain.



11. *SC. ANGULATA*. (pl. xxxii. f. 5.) *Say*, Boston American journal, pl. 27, *Sc. Humphreysii*; Kiener?

*T. ovali*, obtusâ, lævi: anfractibus paucis, separatis; varicibus distantibus, crassis, supernè angulatis, ad suturam junctis: aperturâ ovali, labio interno sub-expanso: colore albo.

Much more oval and obtuse, than *Sc. communis*, with the whorls much less numerous in proportion to its bulk. It is found in some cabinets labelled "West Indies;" and is described by Mr. Say, as an American shell.

12. *SC. PHILIPPINARUM*. (pl. xxxii. f. 1, 2, 3.) *Sow. Jun.*, Zool. Proc. 1844.

*T. elongatâ*, acuminatâ, lævi; anfractibus numerosis, vix separatis; varicibus distantibus, tenuis, obliquis, supernè vix angulatis, ad suturam junctis: colore inter varices, pallidè fulvo, vel castaneo nigricante: variat colore albo.

As in the case of some of the preceding and following species, the whorls are so far separated, that a fine thread might be passed between them. One variety is of a chesnut colour between the varices, which are white. Brought by Mr. Cuming from Catuanan, Isl. Luzon, and by Mr. Hinds from Amboyna.

13. *SC. ACULEATA*. (pl. xxxii. f. 35, 36, and 37.) *Sow. Jun.*, Zool. Proc. 1844.

*T. pyramidali*, lævi, acuminatâ; anfractibus vix separatis; varicibus laminatis, reflexis, anticè sub-rotundatis, prope suturam in dentem acutum productis, ad suturam plicatim junctis: variat varicibus crassis: colore albo, vel pallidè fulvo.

Brought by Mr. Hinds from Hong Kong in China, the straits of Macassar, Malacca, and Amboyna. Also by Mr. Cuming from the Isle of Negroes, and the variety with thick ribs from Catuanan.

14. *SC. GRACILIS*. (pl. xxxii. f. 33, 34.) *Sow. Jun.*, Zool. Proc. 1844.

*T. aculeata*, similimâ, sed graciliori.

Brought from Dumaguete, in the Isle of Negroes, by Mr. Cuming, and so much narrower than the preceding species, as perhaps, to justify the distinction which we have hesitatingly made.

15. *SC. MURICATA*. (pl. xxxii. f. 29, 31, 32.) *Kiener*, pl. 4 f. 11.

*T. pyramidali*, lævi, acuminatâ: anfractibus vix separatis:

varicibus distantibus, laminatis, latis, extantibus, posticè in angulum acutum productis; aperturâ ovali, labio interno subincrassato: colore albo.

The varices of this species are broad, projecting, and flat, with an angle at some distance from the suture; the outline of the varix above the angle is curved inwards, so that the angle forms an elevated point.

A common West Indian species.

16. *Sc. MITRÆFORMIS*. (pl. xxxii. f. 30.) *Sow. Jun. Zool. Proc.* 1844.

*T. Sc. muricatæ* similimâ, sed magis tenui; varicibus angustioribus, angulis magis elevatis; anfractibus magis distinctis: colore albo.

The varices of this shell are less expanded, and the tooth-like angle more elevated than in *Sc. muricata*; the shell is also lighter and more elegantly formed.

From Guacomayo, in Central America. The only specimen we have seen is in Mr. Cuming's Collection.

17. *Sc. TENUICOSTATA* (pl. xxxiv. f. 76.) *Sow. Junr. Zool. Proc.* 1844.

*T. Sc. muricatæ* similimâ, sed magis ventricosâ, aperturâ majori; colore albo.

This species is so much more ventricose than *Sc. muricata*, as to render the separation necessary. The aperture is much larger. A small specimen was brought by Mr. Cuming from the Isle of Luzon, but the most characteristic specimens are unaccompanied by any information as to locality.

18. *Sc. TENUIS*. (pl. xxxii. f. 6, 7.) *Sow. Jun. Zool. Proc.* 1844.

*T. tenui, pyramidalis, acuminatâ, lævi*; anfractibus vix contiguis; varicibus numerosis, laminatis, extantibus, regularibus, posticè rectangulatis, ad suturam inter se junctis; colore albo.

A very common West Indian shell, very thin and fragile with numerous sharp, laminar, angulated ribs.

19. *Sc. DENTICULATA* (pl. xxxii. f. 25. 26.)

*T. pyramidalis, acuminatâ, tenui, spiraliter minutè striatâ*; anfractibus rotundatis, paululum separatis; varicibus numerosis sub-recurvis, prope suturam in dentem acutum productis; aperturâ sub-rotundatâ, labio interno paululum incrassato: colore albo.

Similar to the last, but striated and having a tooth-shaped

angle on each varix near the suture.

Also from the West Indies.

20. *Sc. FRAGILIS*. (pl. xxxiii. f. 64, 65, 66.) *Hanley*, Book of Species.

*T. pyramidalis*, acuminatâ, lævi; anfractibus vix contiguus; varicibus numerosis, tenuis, laminatis, ad suturam paululùm dilatatus et junctis; aperturâ ovali: colore albo.

A common West Indian shell, which has been confounded with *Sc. Clathrus* and others. The ribs are widened at the suture, where they are joined with those of the whorl above them, so as to form a continuous line obliquely running up the spire. The colour is generally white, but figure 64 is taken from a dull-grey specimen in Mr. Cuming's Collection from St. Vincents.

21. *Sc. GLABRATA*. (pl. xxxiv. f. 101,) *Hinds*. Zool. Proc. 1843.

*T. pyramidalis*, acuminatâ, glabrâ; anfractibus vix contiguus; varicibus numerosis, tenuis, laminatis, ad suturam junctis, paululùm dilatatis, reflexis, et in dentem acutum productis, colore palide fulvo, inter varices regulariter marmorato.

Like the last, but the ribs rather fewer in number and slightly reflected and tooth-shaped at the suture. The younger specimens are beautifully marbled with pale fawn between the varices. Brought by Mr. Hinds from Maccassar and Malacca.

22. *Sc. GEORGETTINA*. (pl. xxxiv. f. 77.) *Keiner*.

*T. sub-elongata*, lævi; anfractibus vix contiguus; obliquis; varicibus numerosis, sub-rotundatis, simplicibus, ad suturam junctis; colore albo.

This shell, which was purchased by Mr. Cuming at Paris, appears on examination, to correspond with the figure and description of *Keiner*. The ribs are more numerous and rounded than in *Sc. communiformis* and more simple at the suture.

23. *Sc. PRINCIPALIS*. (pl. xxxiv. f. 75.) *Pallas*, *Sc. costulata*, *Keiner*.

*T. pyramidalis*, sub-ventricosâ, tenui, lævi; anfractibus vix contiguus; varicibus numerosis, laminatis, ad suturam dilatatis, irregulariter junctis; aperturâ magnâ; labio interno spiraliter incrassato, colore albo.

The ribs are much more numerous, the shell more ventricose, and the whorls more rapidly increasing in size than

nSc. communiformis. Xipixappi, West Columbia, Mr. Cuming. This shell agrees with Pallas's figure, which is copied by Martini, in every respect but size.

24. SC. OBLIQUA. (pl. xxxiii. f. 69.) *Sow. Jun.*

T. tenui, pyramidali; anfractibus obliquis, vix separatis; varicibus numerosis, angulatis, laminatis. Colore albo.

More slender and oblique than Sc. tenuis, with ribs less angular.

From Mr. Cuming's collection.

25. SC. OBESA. (pl. xxxiii. f. 70, 71.) *Sow. Jun.*

T. ventricosâ, brevi; anfractibus prominentibus, vix separatis, rapidè crescentibus, varicibus inæqualibus, sub-distantibus, lævibus, reflexis, prope suturam elevatis; non-nullis, incrassatis, duplicatis: aperturâ obliquè ovali, magnâ; umbilico parvo. Colore inter varices pallidè griseo, margine aperturæ luteo.

A very ventricose species, with rapidly increasing whorls and not very regular varices, simple in form, slightly reflected. The margin of the aperture has a yellow tinge. The whorls do not quite touch each other—although the distance is scarcely perceptible. Mr. Cuming and Mr. Metcalfe have it from Australia.

26. SC. VENOSA. (pl. xxxiii. f. 72, 73.) *Sow. Jun.*

T. pyramidali, lævi, acuminatâ, imperforatâ; anfractibus sub-numerosis, prominentibus, vix contiguïs; varicibus 12, proximis, crassis, in medio valide reflexis, latis, supernè angulatis, prope suturam sub-angustatis; aperturâ rotundatâ: colore inter varices pallidè fulvio.

Remarkable for the shape of the varices, which are turned backward, so as to give the appearance of rounded, tumid veins; the interstices, which appear narrow, are of a delicate fawn colour.

From the West Indies.

27. SC. LYRA. (pl. xxxiii. f. 38, 39, pl. xxxiv. f. 81, 82.) *Sow. Jun.*

T. ventricosâ, acuminatâ; anfractibus prominentibus rapidè crescentibus, prope suturam elevatis, suturâ profundâ distinctis: varicibus tenuis, valde numerosis, obliquis; aperturâ magni, ovali; labio interno tenui, obliquo; umbilico parvo: colore pallide fulvo, fasciis duabus fuscis, plus minusve distinctis.

A very beautiful species with ventricose whorls, distinguished by a deep suture, and numerous thin, close, regular varices entering the suture obliquely. The colour is very pale brown, or dull white, with two bands of deeper or paler brown;



those of the individual fig. 81, appear stronger, in consequence of the varices being partly worn off. Brought from the Island of Masbate, Philippines, by Mr. Cuming.

28. *Sc. DUBIA*. (pl. xxxiii. f. 41.) *Sow. Jun. Z. P.* 1844.

*T. ventricosâ, acuminatâ, minutè striatâ; anfractibus sub-prominentibus, suturâ profundâ distinctis, rapidè crescentibus; varicibus numerosis, tenuibus, in medio anfractuum sub-obsoletis, ad suturam paululùm expansis; aperturâ magnâ, sub-ovali; labio externo tenui, labio interno sub-expanso: umbilico parvo: colore albo.*

We have only obtained an imperfect specimen from Mr. Cuming's cabinet, unaccompanied by any information. It differs from *Sc. Lyra* in the thinness of the varices, which, toward the centre of the whorls, are nearly obsolete; in the suture being less deep, and the whorls less raised near it; in the varices being slightly spread in a web-like form at the suture; and in being spirally striated, and without colour.

29. *Sc. IRREGULARIS*. (pl. xxxiii. f. 40, 60.) *Sow. Jun. Z. P.* 1844.

*T. ventricosâ, acuminatâ, lævi; anfractibus contiguïs, rotundatis, gradatim crescentibus; suturâ distinctâ, varicibus tenuis, numerosis, inæqualibus; nonnullis magnis; aperturâ oblique ovali; umbilico mediocri: colore albo.*

A ventricose, sharp-pointed species, with the whorls gradually increasing in size, separated by a deep suture; most of the varices are very thin and numerous, with sharp edges, with here and there one of thicker and larger size. The umbilicus is of a middle size. The shell is generally white. It is brought from Catanuan, Isle of Luzon, Philippines, by Mr. Cuming.

30. *Sc. INCONSPICUA*. (pl. xxxiii. f. 53.) *Sow. Jun.*

*T. Sc. irregulari* similimâ sed varicibus magis numerosis, umbilico minori; labio interno anticè sub-angulato.

The ribs are exceedingly numerous, regular and fine; the umbilicus is smaller than in *Sc. irregularis*, which it otherwise resembles, and the inner lip is reflected at the lower or anterior part in the form of an angle. From West Indies.

31. *Sc. TRIFASCIATA*. (pl. xxxiii. f. 42, 43, 44.) De Hæn.

*T. ventricosâ, brevi, lævi; anfractibus rotundis, paucis; suturâ profundâ: varicibus numerosis, inæqualibus, laminatis; nonnullis duplicatis; aperturâ obliquè ovali, labio interno, reflexo, sub-expanso: umbilico mediocri: colore pallide fulvo, lineis spiralibus tribus fucis rubescentibus, quaram mediani latâ.*

Much shorter and stouter than the other species which most nearly resemble it in other respects. The varices are numerous and prominent, some of them doubled; the whorls are few, the suture deep, the umbilicus large. Three bands of a reddish colour are visible between the ribs. Brought from Masbate, Philippines, by Mr. Cuning; but a white variety in the collection of Mr. Sowerby is ticketed "East Indies."

32. *Sc. LINEOLATA* (45, 46, 48.) *Kiener*.

*T. tenui*, *Sc. trilineatæ* simili, sed magis elongatâ; fasciis obscuris.

Figured by Kiener as a variety of the preceding species, but a much more elongated shell. Brought from Masbate, Philippines, by Mr. Cuning, and from Japan by Dr. Sibbald.

33. *Sc. RUBRO-LINEATA*. (pl. xxxiv. f. 83, 84.) *Sow Jun.*

*T. pyramidali*, lævi, sub-ventricosâ; anfractibus rotundatis prominentibus, gradatim crescentibus; varicibus numerosis sub-æqualibus, validis; aperturâ ovali; labio interno anticè subquadrato; umbilico magno: colore pallidè fulvo linea rubrâ vel vuscâ in medio anfractuum.

The whorls of this species are very prominent, the varices, numerous, regular, and thick, as in *Sc. trilineatâ*, but the form is more elongated, and the umbilicus very much larger. The specimens, the smaller of which has a bright red line in the centre of the whorls, are from the cabinet of Miss Saul.

34. *Sc. CRASSA*. (pl. xxxiii. f. 55.) *Sow. Jun. Z. P.* 1844.

*T. pyramidali* ventricosâ, lævi; anfractibus rotundatis, gradatim crescentibus; varicibus sub-numerosis, inæqualibus, laminatis, ad suturam magis expansis, nonnullis in medio anfractum sub-obsoletis: aperturâ magnâ; labio interno anticè subquadrato; umbilico parvo: colore, inter varices pallidè fulvo, fasciis binis latis; unâ prope suturam, alterâ in medio anfractuum. Variat testâ albâ, opacâ.

Much larger and more solid than *Sc. lineolata*, with the ribs unequally laminated, spreading more at the suture than at the middle of the whorls. The whorls are not so prominent as in *Sc. rubro-lineatâ*, and the umbilicus is much smaller. Of the four specimens brought from Catanuan, Isl. Luzon, Philippines, by Mr. Cuning, two have two broad bands in the upper part and near the centre of the whorls.

35. *Sc. IMPERIALIS*. (pl. xxxiii. f. 56, 57.) *Sow. Jun. Zool. Proc.* 1844.

*T. pyramidalis*, ventricosâ, acuminatâ, lævi ; anfractibus magnis, rotundatis, contiguïs, prope suturam elevatis, gradatim crescentibus ; suturâ profundâ varicibus numerosis, simplicibus, versus apicem tenuibus, gradatim crescentibus, in ultimo anfractu crassis, nonnullis duplicatis ; aperturâ magni, ovali ; umbilico magno : colore, inter varices, fulvo, fasciis binis fuscis in medio anfractus ultimæ purpureo confusis.

A very beautiful shell, of an elegant pyramidal form, with numerous regular varices, which in the upper whorls are thin, but in the last whorl are much thicker and some doubled. The umbilicus is large. The colour between the varices is dull fawn, with two bands, which in the last whorl are blended with purple. Mozambique and Swan River.

36. *Sc. AURITA*. (pl. xxxiii. f. 62.) *Sow. Jun. Zool. Proc.* 1844.

*T. elongatâ*, lævi, umbilicatâ ; anfractibus rotundatis, contiguïs ; varicibus lævibus, decumbentibus, subnumerosis, prope suturam sub-arcuatis, nonnullis crassis, pluribus tenuis ; aperturâ magnâ, auriformi ; colore pallidè fulvo, inter varices, fasciis tribus fuscis.

In general form resembling *Sc. lineata* of Say, but differing from it in having a wide umbilicus. The last whorl and aperture are large in proportion to the size of the shell, in which respect it differs from *Sc. turricula* ; it is prettily coloured with three reddish brown bands ; the varices are rather numerous, some rather thick, and others very thin.

Coast of Coromandel.

37. *Sc. TURRICULA*. (pl. xxxiii. f. 61. and pl. xxxiv. f. 88.) *Sow. Jun.*

*T. elongatâ*, umbilicatâ, plerumque transversim minutè striatâ ; anfractibus numerosis, rotundatis, gradatim crescentibus ; varicibus sub-numerosis, plerumque tenuis, nonnullis crassis ; aperturâ ovali, parvâ ; colore albo vel irregulariter fulvo.

The whorls are more numerous, and increase in size more gradually than the last, the mouth is consequently smaller, the ribs are irregular, differing from each other in thickness. There are, in most of the specimens numerous transverse striæ, which are wanting in others ; one variety is white and strongly striated ; another is irregularly patched with light brown, and nearly smooth. The latter variety only is brought by Mr. Cuming from Catanuan Isl. Luzon, Philippines. Both occur in the West Indies.

38. *Sc. VESTALIS*. (pl. xxxiv f. 97.) *Hinds. Zool. Proc.* 1843.

*T. pyramidalis*, acuminatâ, spiraliter minutissime striatâ; anfractibus numerosis, rotundatis, suturâ distinctâ; varicibus simplicibus, plerumque tenuissimis, nonnullis crassiusculis; aperturâ ovali, posticâ acuminatâ, labio interno anticè subincrassato, umbilico mediocri; colore albo.

A beautiful small white shell brought by Capt. Belcher from New Guinea. It is finely striated in a spiral direction; most of the varices are thin, so as to be scarcely visible, with here and there one more prominent.

39. *Sc. IMMACULATA*. (pl. xxxiii. f. 58.) *Sow. Jun. Zool. Proc.*

*T. Scalariae vestali* similimâ, sed magis elongatâ, umbilico majori, varicibus prope suturam simplicibus.

Brought by Mr. Cuming from Catanauan.

Isl. Luzon, Philippines.

40. *Sc. MARTINII*. (pl. xxxiv. f. 78 and 86.) *Wood. Index. Test. Sc. raricosta*, *nonnul*, *Sc. striata*, *Kiener*.

*T. pyramidalis*, acuminatâ, umbilicatâ, transversim striatâ; anfractibus rotundatis, numerosis, rapidè crescentibus; varicibus plerumque tenuissimis, vel obsoletis, nonnullis crassis, validis, arcuatis; aperturâ ovali, auriformi, magnâ; colore albo.

A well known species from the West Indies, frequently confounded with, and possibly included in *Sc. raricosta* of Lamarck, from which it totally differs. The greater part of the varices are so thin as to be scarcely visible, but at irregular intervals thicker ones occur. There is a small specimen from Isle Bohol in the Philippines, in which nearly all the varices are elevated: it is found under stones, at low water, by Mr. Cuming.

41. *Sc. RARICOSTATA*. (pl. xxxiv. f. 79, 80.) *Sc. raricosta*, *Lamarck*. (Not of Martini, *Conch.* 4. t. 153 f. 1435-6.

*T. ventricosâ*, pyramidalis, cancellatâ; anfractibus rotundatis, rapidè crescentibus; suturâ distinctâ; varicibus raris prominentibus, crenulatis, rotundatis, reflexis; aperturâ magnâ, sub-circulari, marginè crasso, labio interno anticè sub-expanso; umbilico parvo; colore albo.

A ventricose shell, minutely cancellated, with here and there a thick, crenulated reflected varix; the aperture is large, with a very small umbilicus behind it. Ceylon?



42. *Sc. CURVILINEATA*. (pl. xxxii. f. 59.) *Sow. Jun.*

*T.* ovali, lævi, tenui, imperforatâ; anfractibus paucis, rapidè crescentibus; varicibus subnumerosis, curvilineatis, lævibus, simplicibus; aperturâ ovali, labio interno anticè paululum expanso: colore pallidè fulvo.

We have only seen one specimen, which is in Mr. Cuming's collection, from Sansonati, in Central America.

43. *Sc. CATANUENSIS* (pl. xxxiv. f. 93 and 94.) *Sow. Jun. Zool. Proc.*, 1844.

*T.* pyramidalî, acuminatâ, minutissimè striatâ; anfractibus rotundatis, rapidè crescentibus, varicibus plerumque obsoletis, nonnullis rariùs crassis; aperturâ ovali, sub-auriformi; umbilico parvo; colore validè griseo, in medio anfractuum fasciâ fuscâ, latâ, obscurâ.

It is much shorter than *Sc. Martinii*, with the thickened costæ still more fewer in number; the aperture is less oval and less auriform. There is a broad band of pale brown in the centre of the whorls. Brought from Catanuan, Isl. Luzon, Philippines, by Mr. Cuming. Found in sandy mud 8---10 fathoms.

44. *Sc. SIMILIS*. (pl. xxxiv. f. 90.) *Sow. Jun. Zool. Proc.* 1844.

*T.* sub-ovalî, spiraliter minutissimè striatâ; anfractibus paucis; varicibus tenuissimis, plerumque numerosis, nonnullis crassiusculis; aperturâ ovali, postice sub-angulatâ, labio interno vix incrassato et expanso, umbilico parvo; colore palidissimè fulvo.

The whorls are much less prominent, the minute varices more numerous, and the umbilicus considerably smaller than in *Sc. Catanuensis*.

Found by Mr. Cuming at Puerto Galero, Isle Mindoro, in sandy mud, 4—5 fathoms.

45. *Sc. BULLATA*. (pl. xxxiv. f. 87.) *Sow. Jun. Zool. Proc.* 1844.

*T.* ventricosissimâ, brevi, lævi; anfractibus paucis, rapidè crescentibus; varicibus sub-numerosis, irregularibus, decumbentibus, plerumque tenuissimis, nonnullis crassioribus, ad suturâm paululum elevatis et reflexis; aperturâ magnâ; umbilico parvo, colore albo.

We have only one specimen of this extremely ventricose shell, in a very imperfect state, from Isl. Capul, Philippines, taken by Mr. Cuming on the coral reefs.

46. *Sc. BULBULUS*. (pl. xxxiv. f. 85.) *Sow. Jun. Zool. Proc.* 1844.

*T. ventricosâ, pyramidali, lævi, fere imperforatâ ; anfractibus paucis, rapidè crescentibus ; varicibus sub-numerosis, irregularibus, inequalibus, extantibus ; aperturâ magnâ, labio interno sub-expanso, antice sub-quadrato ; colore pallidissimè rufo.*

This species is also rather ventricose, but the varices are laminar, and stand out in relief from the shell. The only known specimen is in the possession of Mr. G. Sowerby, Sen. From——?

47. *SC. FRIABILIS.* (pl. xxxiii. f. 74.) *Sow. Jun. Zool. Proc.* 1844.

*T. pyramidali, acuminatâ, tenui, imperforatâ ; varicibus tenuissimis, valde numerosis, laminatis, extantibus, prope suturam acutè angulatis ; aperturâ magnâ, labio interno sub-incassato ; colore albo.*

A thin pyramidal species with extremely numerous, thin, laminar, varices, which project in an acute angle close to the suture. In Mr. Cuming's collection. Brought from Swan River, by Lieut. Collie, R.N.

48. *SC. INDISTINCTA.* (pl. xxxv. f. 141.) *Sow. Jun. Zool. Proc.* 1842.

*T. elongatâ, imperforatâ, minutè spiraliter striatâ ; anfractibus numerosis, gradatim crescentibus, suturâ distinctâ ; varicibus numerosis, inæqualibus, rotundatis, decumbentibus, simplicibus ; aperturâ parvâ, labio interno, antice sub-incrassato ; colore, albo.*

In Mr. Cuming's collection. Brought from St. Blas, Gulf of California, by the Hon. Mr. Harris.

49. *SC. SULCATA.* (pl. xxxv. f. iii.) *Sow. Jun. Zool. Proc.* 1844.

*T. elongatâ, acuminatâ, imperforatâ, minutè spiraliter striatâ ; anfractibus numerosis, gradatim crescentibus ; suturâ distinctâ ; varicibus numerosis, tenuis, prope suturam angulatis ; aperturâ ovali, labio interno vix incrassato ; colore albo.*

A beautifully pointed, elongated shell, finely striated in a spiral direction, with numerous slightly prominent varices, which are angular near the suture. Brought from Catanuan, Isl. Luzon, Philippines, by Mr. Cuming.

50. *SC. NOVÆGLIÆ.* (pl. xxxv. f. 112.) *Couthoy, Boston Jour. Sc.* 2, No. 1, Pl. 3, f. 5.

*T. pyramidali, acuminatâ, fere imperforatâ, spiraliter striatâ*

minute striatâ; anfractibus numerosis; suturâ distinctâ, varicibus sub-numerosis, inequalibus, plerumque tenuis, prope suturam in dentem acutum productis; aperturâ mediocri, antice sub-quadratâ; margine incrassato, posticè unidentifero, labio interno antice incrassato et extenso: colore, inter varices obscurè fusco.

A very elegantly formed little shell, broader towards the aperture than the last; the varices, which are rather numerous and unequal in thickness, have each a very fine tooth-like point close to the suture. The only specimen we have seen, is in the collection of Mr. G. B. Sowerby, Sen.

51. *SC. SUBTILIS*. (pl. xxxv. f. 137.) *Sow. Jun., Zool. Proc.*

*E.* elongatâ, angustatâ, spiraliter minutè striatâ, imperforatâ; anfractibus numerosis, gradatim crescentibus, prope suturam elevatis; varicibus numerosissimis, laminatis, crenulatis, superne angulatis; aperturâ parvâ: colore, inter varices, obscure fusco.

A small elongated, turreted shell, to the beauty of which, neither the description nor the figure can do justice; the varices are numerous, laminated, and regularly crenulated. Brought by Mr. Cuming, from the the Isles Caminguing and Corregidor, Philippines. From the former, in coarse sand at seven fathoms; from the latter in sandy mud 30 fathoms.

52. *SC. CLATHRATULUS*. (pl. xxxiii. f. 47.) *Montague, Test Brit. p. 297.*

*T.* pyramidalî, sub-acuminatâ, imperforatâ, anfractibus numerosis; suturâ distinctâ; varicibus numerosis, rotundatis, irregularibus, prope suturam sub-angulatis: colore albo.

This common British pyramidal species, has numerous, unequal, rounded varices, which are slightly expanded, and angulated close to the suture.

54. *SC. MULTICOSTATA*. (pl. xxxiv. f. 96.) *Sow. Jun. Zool. Proc. 1844.*

*T.* sub-ovali, lævi, imperforatâ, obtusâ; varicibus sub-numerosis, regularibus, obliquè ad apicem continuis, sub-rotundatis; aperturâ ovali, labio interno antice expanso et incrassato; colore, pallidissime fulvo.

Rather oval and obtuse, with numerous regular prominent rounded varices. The anterior part of the inner lip is thickened and spread over the columella.

From Corregidor, Philippines, H. Cuming.

55. *Sc. CONCINNA*. (pl. xxxiii. f. 63.) *Sow. Jun. Z. P.* 1844.

*T. multicostatæ* simili, sed anfractibus magis prominentibus, varicibus magis numerosis, labio interno tenui.

The whorls in this species are more prominent, the ribs more numerous, and the inner edge of the aperture thinner than in *Sc. multicostata*. Found in sandy mud 68 fathoms, at Loay, Isle of Bohol, Philippines. Mr. Cuming.

56. *Sc. CREBERRIMA*. pl. (xxxiv. f. 95.) *Hinds. Zool. Proc.* 1843.

*T. pyramidalis*, acutâ, lævi, imperforatâ; anfractibus numerosis, rotundatis; suturâ distinctâ; varicibus numerosissimis, lævibus, paululum prominentibus; aperturâ sub-rotundatâ; colore, pallide griseo.

The varices in this species are still more numerous than in either of the two preceding, and the interstices are narrower. Brought from New Guinea by Mr. Hinds.

57. *Sc. CONNEXA*. (pl. xxxiv. f. 98.) *Sow. Jun. Zool. Proc.* 1844.

*T. ovali*, sub-elongatâ, lævi, imperforatâ; suturâ profundâ; varicibus numerosis, laminatis, prominentibus, ad apicem obliquè continuis; aperturâ ovali; colore, inter varices, obscure fulvo.

The numerous varices of this small species are laminar, prominent, and continued from whorl to whorl up the spire, as in *Sc. Clathrus* of Linneus, from which it differs essentially in not having the spiral rib at the lower part of the last whorl. From Sual, Pr. Pangasinan, Isl. Luzon, Found in 7 fathoms sandy mud by Mr. Cuming.

58. *Sc. PULCHERRIMA*. (pl. xxxiv. f. 92.) *Sow. Jun. Z. P.* 1844.

*T. pyramidalis*, sub-ventricosâ, spiraliter minutè striatâ, imperforatâ; anfractibus rotundatis; suturâ profundâ; varicibus sub-numerosis, laminatis, extantibus, prominentibus supernè in angulum acutum productis; aperturâ ovali, posticè acutangulatâ, anticè sub-quadratâ, labio interno sub-expanso; colore, inter varices, fusco purpurascente.

Pyramidal, acute, rather ventricose, spirally striated, with a deep suture, and with rather broad, laminar varices, which are expanded into an acute angle near the suture. Collected by Mr. Cuming at Dumaguete, Isl. Negros, Philippines.

59. *Sc. OVALIS*. (pl. xxxiv. f. 104.) *Sow. Jun. Z. P.* 1844.

*T. sub-ovalis*, lævi; anfractibus paucis; ultimo magno, vari-



cibus 9, crassis, rotundatis; aperturâ ovali, marginè incrassato, labio interno incrassato, expanso; colore, inter varices, palidè cæruleo.

The whorls of this very small shell are few in number, the last disproportionately large, with about nine very thick rounded varices; the aperture is oval, with a very thick edge, and the inner lip expanded.

Brought by Mr. Cuming from Cagayan in the Isle of Mindinao.

60. SC. HEXAGONA. (pl. xxxiii. f. 67.) *Sow. Jun. Zool. Proc.* 1844.

T. brevi, lævi, imperforatâ; anfractibus contiguis; varicibus sex, crassis, prominentibus, ad apicem obliquè continuis; aperturâ rotundatâ: colore albo.

A short, imperforated white species, with whorls closely united, and strong varices forming about six oblique, continuous lines along the spire. In the cabinet of Mr. Cuming, brought by Col. Moffat from Acupalca.

61. SC. UNIFASCIATA. (pl. xxxiii. f. 68.) *Sow. Jun. Zool. Proc.* 1844.

T. pyramidali, sub-elongatâ, lævi, imperforatâ; anfractibus numerosis, contiguis; varicibus sex, rotundatis, angustis, ad apicem obliquè continuis; aperturâ rotundatâ, labio interno sub-incrassato; colore inter varices, pallidissimè griseo, fasciâ fuscâ prope suturam cincto.

Similar to the preceding, but more elongated, with more numerous whorls, on the upper part of which, close to the suture, is a broad brown band, by which the species may be distinguished.

West Indies.

62. SC. ELENENSIS. (pl. xxxiv. f. 102.) *Sow. Jun. Zool. Proc.* 1844.

T. pyramidali, lævi, imperforatâ; anfractibus contiguis; varicibus sex, ad suturam sub-plicatis, irregulariter continuis; aperturâ ovali; colore albo.

Like the last, but without any band, and having the varices straighter, and not so regularly continuous. Collected by Mr. Cuming at Punta, St. Elena, West Columbia, in sandy mud, six fathoms.

63. SC. OBTUSA (pl. xxxiii. f. 54.) *Sow. Jun. Zool. Proc.* 1844.

T. ventricosâ, pyramidali, imperforatâ, lævi; anfractibus contiguis; varicibus numerosis, crassis, rotundatis, continuis,

supernè sub-angulatis ; aperturâ rotundatâ, anticè sub-mareginatâ, labio interno spiraliter recurvo ; colore albo.

Rather short and thick, white, with numerous varices, which continue up the spire, from whorl to whorl, and are slightly angular above ; the inner lip of the aperture is spirally twisted, and forms an undulated notch at its juncture with the outer lip. Brought by Mr. Cuming from Punta, St. Elena, found in sandy mud six fathoms.

64. *SC. PORRECTA*. (pl. xxxv. f. 139.) *Hinds*, Zool. Proc. 1843.

*T. pyramidali, acuminatâ, imperforatâ ; anfractibus subangulatis, ultimâ magnâ ; varicibus numerosis, crassis, ad angulum anfractuum acuminatis ; aperturâ sub-quadratâ, anticè angulatâ ; colore fusco, lineâ pallidâ ad inferiorem partem anfractuum.*

An acuminated shell, with angular whorls, the last of which is disproportionately large ; the varices are numerous, thick, and somewhat irregular, with elevated points at the angle. The colour is darkish brown, with a narrow band of a darker colour near the lower part of the whorl. Brought by Mr. Hinds, from the Straits of Malacca.

65. *SC. MINDOROENSIS*. (pl. xxxiv. f. 91.) *Sow. Jun.* Zool. Proc. 1844.

*T. pyramidali, lævi, imperforatâ, tenui ; anfractibus vix separatis ; varicibus numerosis, simplicibus, ad suturam sub-irregulariter junctis ; colore albo.*

A small, white, thin shell, slightly resembling *Sc. obliqua*, but less oblique, and with more numerous, and less prominent varices. The whorls are close. Brought by Mr. Cuming from Puerto Gallero, Isl. Mindoro.

66. *SC. GRADATA* (pl. xxxiv. f. 109.) *Hinds*. Zool. Proc. 1843.

*T. pyramidali, acuminatâ, lævi, imperforatâ ; anfractibus numerosis, prope suturam elevatis ; suturâ profundâ ; varicibus rotundatis, sub-numerosis, distantibus, supernè angulatis ; aperturâ sub-ovali, posticè angulatâ, labio interno tenui ; colore albo.*

The whorls of this elegant species are elevated near the suture, and with the angle on the varices, have the appearance of steps.

Brought by Mr. Hinds, from Amboyne.

67. *Sc. ACICULINA*. (pl. xxxiv. f. 100. *Hinds, Zool. Proc.* 1843.

*T. parvâ, elongatâ, acuminatâ, imperforatâ, tenui, lævi; anfractibus contiguis, prope suturam elevatis; varicibus decem, inequalibus; aperturâ sub-quadratâ; colore, inter varices, obscurè fulvo.*

America, Mr. Hinds

68. *Sc. ALBOLINEATA*. (pl. xxxiii. f. 52.) *Sow. Jun.*

*T. aciculinae similima, sed magis ventricosâ, costis magis numerosis, continuis; colore inter varices fulvo.*

This species is shorter and thicker than *Sc. aciculina*, with more numerous and less angulated varices. From the beautiful fawn colour contrasting with the whiteness of the ribs, it resembles *Sc. Philippinarum*, but the whorls are united.

69. *Sc. POLITA*. (pl. xxxiv. f. 99.) *Sow. Jun. Zool. Pooc.* 1844.

*T. tenui, elongatâ, lævi, imperforatâ; anfractibus numerosis, vix prominentibus; varicibus sub-numerosis, tenuis, in medis anfractuum obsoletis; colore pallidè griseo.*

The whorls are numerous, and not very prominent. The varices appear as if worn away in the centre of the whorls. Taken by Mr. Cuming at Xipixappi, West Columbia, in sandy mud, ten fathoms deep.

70. *Sc. TURTONIS*. (pl. xxxiv. f. 106, 107, 108. var. pl. xxxiv. f. 89.) *Sc. planicostata*, Bivon.

*T. elongatâ, imperforatâ, lævi; anfractibus numerosis, vix prominentibus, contiguis; varicibus decumbentibus, inequalibus, ad suturam expansis, elevatis; aperturâ ovali, labio interno crasso; colore maculis et fasciis variegato.*

This species resembles in general appearance, and in the disposition of the colours, *Sc. communis*, but the whorls are united and more numerous; the varices are flat, and some of them exceedingly broad: varieties, fig. 106, 107, are from British specimens, fig. 108, from Sicily, fig. 80, from Puerto Galero, Isl. Mindinao.

71. *Sc. TREVELYANA*. (pl. xxxv. f. 129.) *Leach.*

*T. pyramidalis, acuminatâ, imperforatâ; anfractibus contiguis, rotundatis; varicibus decumbentibus, inequalibus, ad suturam expansis, in dentem acutum elevatis; colore pallidè fulvo.*

Smaller, and more ventricose in proportion to its length than the preceding, with the varices narrower, rather more

prominent, spread at the suture, and raised into a small sharp tooth. Great Britain.

72. SC. GREENLANDICA. (pl. xxxiv. fol. 105 and 110.)  
 "Clathrus Greenlandicus," *Chemn.* 11. p. 155. f. 1878-79.  
 planicostata? *Kiener*; subulata, *Couthoy*? Boston Journ. Sc.  
 Vol. 2, No. 1.

T. elongatâ, crassâ, spiraliter sulcatâ; anfractibus contiguâ, vix prominentibus; varicibus decumbentibus; inaequalibus, ad suturam expansis, reflexis, et ad anfractum proximam elevatis; aperturâ sub-triangulari, colore, inter varices, griseo fulvescente.

T. juniore, varicibus expansis, reflexis.

Like Sc. *Turtonis* in general form, but with fewer whorls: the varices more elevated and spread, and the whorls spirally grooved. From Greenland and Newfoundland.

73. SC. LINEATA. (pl. xxxiii. f. 49, 50, 51.) *Say*.

T. pyramidalis, sub-ventricosâ, imperforatâ, lævi; anfractibus rotundatis, rapidè crescentibus; ultimo magno, lineâ spirali, elevatâ, ad inferiorem partem anfractuum varicibus plerumque tenuis; nonnullis magnis, simplicibus, numerosis: aperturâ magnâ; colore inter varices, fusco nigricante, aliquando fasciis binis; vel pallidè fulvâ, fasciâ rubrâ.

The elevated line at the lower part of the whorls, is very slight in this species, but easily perceptible, the varices are irregular, some of them large. From America.

74. SC. CLATHRUS. (pl. xxxv. f. 131, 132, 134.) *Linneus*,  
 Sc. lamellosa, *Lam. var.* Sc. monocycla. *Kiener*.

T. pyramidalis, ventricosâ, lævi, lineâ elevatâ spirali ad inferiorem partem anfractuum; varicibus 11, distantibus, laminatis, extantibus, ad suturam sub-expansis, ad apicem obliquè continuis; aperturâ magnâ, ovali; colore, inter varices fulvo vel fusco-maculato, prope suturam fasciâ latâ; vel griseo, fasciâ nigrâ.

This well-known species to which the name of *lamellosa* is generally applied, is ascertained, with tolerable certainty, to be the true *clathrus* of Linneus, having the basal keel which is without the common British species bearing that name.

Mediterranean and West Indies.

75. SC. CORONATA. (pl. xxxv. f. 133.) *Lamarck*.

T. lamellosæ simillimâ, sed varicibus magis numerosis: colore albo, inter varices seriebus tribus macularum fuscarum.

The varices are much more numerous than in the last, and



the colour is disposed in three rows of angular brown spots between the varices. West Indies.

76. SC. DIANÆ. (pl. xxxv. f. 124, 125.) *Hinds*, Zool. Proc. 1843.

T. Parvâ, ventricosâ, brevi, lævi, lineâ elevatâ spirali, ad basin anfractuum; anfractibus contiguïs subangulatis; varicibus paucis, laminatis, extantibus, angulatim latè expansis: colore albo.

A small, short, somewhat ventricose shell, with few whorls, and about eight laminar varices, which are spread into broad angles. It is to be regretted, that only one specimen of this very remarkable shell was brought by Mr. Hinds from Amboyna.

77. SC. STATUMINATA (pl. xxxv. f. 127.) *Sow. Jun.* Zool. Proc. 1844.

T. parvâ, crasâ, brevi, lævigatâ, imperfortâ; anfractibus contiguïs, vix prominentibus, anticè lineâ elevatâ cinctis; varicibus quinque, prominentibus, ad apicem continuis, anticè crassis, posticè in angulum elevatum expansis; aperturâ subrotundâ, labio externo, anticè tenui; colore, inter varices, cœruleo.

A small, short, thick species, with very prominent ribs, which are elevated and expanded into a broad angle, at the upper part of the whorls, and very thick at the lower; they are united with each other so as to form five oblique prominent ridges along the spire. Brought by Mr. Cuming from Hayti in Peru.

78. SC. MAGNIFICA. (pl. xxxiv. f. 103.) *Sow. Jun.* Turbo Principalis, *Chemnitz*.

T. elongatâ, imperforatâ, lineis elevatis spiraliter cinctâ, lineâ unâ majori ad inferiorem partem anfractuum, anfractibus sub-numerosis, ventricosis, prope suturam elevatis; suturâ profundâ; varicibus rarissimis, lineis parvis elevatis numerosis; colore albo, pallidissimè purpureo et fulvo tincto.

The figure given in Chemnitz under the name of "*principalis*" "*Pallas*," is evidently taken from an inferior specimen of this magnificent shell; but as it does not agree in any respect with the original figure and description by Pallas, we cannot put much faith in the assertion of Chemnitz as to its identity. We have given a species under the name of *principalis*, which agrees much better with the original figure. The splendid specimen which we have figured, is in the collection of E. C. L. Grüner, Esq. of Bremen, who has lately received it from China.

79. *SC. DECUSSATA*. (pl. xxxv. f. 140.) *Lam. anim. s. vert.* vi. p. 229. *Sc. cancellata*, *Humphreys*.

*T.* elongatâ, imperforatâ, spirâliter sulcatâ; anfractibus 11, contiguis, anticè posticèque angulatis, suturâ profundâ distinctis, ultimo anticè carinâ cincto; varicibus numerosis, posticè angulatis, laqueatis, aperturâ subquadratâ, labio interno crasso, anticè angulato; colore albo.

This elegantly cancellated species is rarely found in a recent state. The specimen figured, is in Mr. Cuming's collection. From the coast of Arabia.

80. *SC. VARICOSA*. (pl. xxxv. f. 126, 128, 143.) *Lam. anim. s. vert. Sc. fimbriata*, *Lam. E.M. pl. 451. f. 4. a. b.*

*T.* elongatâ, spiraliter obsoletè sulcatâ; anfractibus 12, plus minusve prominentibus, ultimo anticè carinâ cincto; suturâ profundâ, lamenis extantibus interruptâ; costulis parvis, numerosis, undulatim crenulatis; varicibus paucis, magnis, extantibus, crenulatis, crassis: aperturâ rotundatâ, margine crasso, labio interno varicoso; colore albo.

The different varieties, if denuded of the small varices, would present a very similar appearance; but these, in some cases, fill up the suture with their terminal laminæ, and so reduce the rotundity of the whorls. The larger, or true varices, occur sparingly at irregular intervals. From Capul, Luzon, Bohol, and Zebu, Philippines, by Mr. Cuming.

81. *SC. COCHLEA*. (pl. xxxv. f., 142.) *Sow. Jun. Zool. Proc.* 1844.

*T.* elongatâ, spiraliter obsoletè sulcatâ; anfractibus 8, prominentibus posticè valide angulatis; anticè carinâ validâ cinctis; costulis parvis, undulatim crenulatis; varicibus magnis, crenulatis, posticè angulatis, rarissimis; aperturâ rotundâ; margine crasso; labio interno crasso, varicoso: colore albo, vel pallidissime fulvo.

Differing from *Sc. varicosa* in having the whorls angular, and the suture very large, so as to present the appearance of a screw. From Loanda, West coast of Africa, by Dr. Tamis. In Mr. Cuming's collection.

82. *SC. AUSTRALIS*. (pl. xxxv. f. 135.) *Lam. anim. s. vert.*

*T.* elongatâ, crassâ, lævi, imperforatâ; anfractibus 9, contiguis, vix prominentibus; ultimo anticè carinâ validâ cincto; suturâ vix excavatâ: varicibus 10, simplicibus, sub-rectis, crassis, lævibus, prominentibus, ad carinam terminantibus: colore albo, vel inter varices obscure purpureo.

A common species from Swan River in Australia. The keel is thick, and forms the termination of the varices, which are also thick, prominent, and smooth. The whorls are not separated by a deep suture

83. *SC. CRASSICOSTATA*. (pl. xxxv. f. 119.) B.M. M.S.

*Sc. Australi* simili, sed varicibus minus prominentibus, et in medio latoribus.

There is a much larger specimen than we have figured, in the British Museum, with the above name attached.

84. *SC. GRANULOSA*. (pl. xxxv. f. 144.) *Turritella granulosa*, *Guoy et Gaimard*, Voyage de l'Astrolabe.

*T. pyramidalis*, elongatâ, minutissimè granulatâ, crassâ, imperforatâ, costulis obsoletis undulatâ; anfractibus 9, vix prominentibus, anticè prope medium carinâ obsoletâ cinctis, ad suturam crenulatis; suturâ indistinctâ; aperturâ subtriangulari; margine incrassato, anticè in angulum extenso; colore pallidè fulvo; aperturâ albâ.

In general form resembling *Sc. Australis*, but the varices are nearly obsolete. From Swan River, Australia.

85. *SC. UNDULATA*. (pl. xxxv. f. 136.) *Sow. Jun. Zool. Proc*, 1844.

*T. sub-elongatâ*, spiraliter minutissimè striatâ, imperforatâ, tenui; anfractibus 11, paululum prominentibus, anticè prope medium carinâ tenui, lineari, cinctis; varicibus tenuissimis curvi-linearibus, regularibus, distantibus; aperturâ anticè angulatâ, colore obscurè albo.

The varices are very thin, curvilinear and regular, but much more distinct than in the preceding species. We have only a single specimen from the collection of Metcalfe, Esq.

86. *SC. BICARINATA*. (pl. xxxv. f. 113, 114.) *Sow. Jun. Zool. Proc*, 1844.

*T. sub-cylindricâ*, elongatâ, imperforatâ, minutè cancellatâ; anfractibus 6, latis, ad latera planis, ad suturam crenulatis, ultimo carinis in medio cincto; aperturâ ovali, margine crasso, minutè crenulato; colore fere albo.

A very curious little shell, with crenulated suture, and two prominent keels in the centre of the last whorls; the edge of the aperture is much thickened. Brought by Mr. Cuming, from Dumaguete, Isl. Negros, found in coarse black sand, at seven fathoms.

87. *SC. CRASSILABRUM*. (pl. xxxv. f. 115, 116.) *Sow. Jun.*

*T.* parvâ, imperforatâ, elongatâ, spiraliter minutissimè striatâ; anfractibus 6—7, antice angulo parvo, postice angulo magno, cinctis; suturâ crenulatâ; costulis triangulatis numerosis; varicibus rarissimis, vel nullis: aperturâ sub-ovali, margine crasso, expanso, minutè striato; colore fere albo.

There is a large angle on the upper, and a smaller one on the lower part of each whorl, which are crossed by undulating ribs. The true varices or external edges of former varices are very scarce, in some specimens altogether wanting. The specimens vary very much in form and appearance, but the aperture is always surrounded by a broad margin. Mr. Cuming has specimens from Ticao, and Cagayan, Isl. Mindoro of the Philippines; also from Sansonati, in Central America.

88. *SC. CRENATA*. (pl. xxxv. f. 123.) (*Turbo crenatus*,) *Linn.*

*T.* sub-elongatâ, imperforatâ, minutissimè granulatâ; anfractibus 8, sub-prominentibus, ad suturam acutè angulatis et crenatis, anticè undulatâ carinâis cinct; varicibus rarissimis vel nullis; aperturâ magnâ triangulari, anticè angulatâ; colore fere albo, vel pallidè fulvo rufescente.

The whorls have a prominent angle close to the suture, which forms a kind of canal, interrupted by the large crenulations surmounting the edge. From Faro in Portugal and from the West Indies.

89. *SC. DIADEMA*. (pl. xxxv. f. 121, 122.) *Sow. Sen.*

*T.* brevi, obtusâ, imperforatâ, minutissime cancellatâ; anfractibus 7, prominentibus, ad suturam canaliferis, angulatis crenulatis; anticè carinâ crassâ cinctis; prope apicem rapide crescentibus; varicibus prope apicem crassis, prominentibus, in ultimo anfractu sub-obsolete; aperturâ ovali; margine crasso, anticè posticeque angulato: colore albo.

Much shorter and more obtuse than *Sc. crenatus*, with the whorls more prominent and excavated at the suture, at the fourth whorl the size increases suddenly, but afterwards more gradually.

Brought by Mr. Cuming from James's Island, Gallapagos.

90. *SC. FUSCA*. (pl. xxxv. f. 138.) *Sow. Jun. Zool. Proc.* 1844

*T.* elongatâ, imperforatâ, spiraliter minutissime striatâ; anfractibus 12, sub-prominentibus; ultimo, carinâ lineari anticè



cinctâ; varicibus tenuissimis, obliquis, ad suturam flexuosis; aperturâ sub-ovali, margine tenui: colore obscurè fulvo, flamulis fuscis obliquis inter varices seriatim picto.

An elongated species, with a very narrow, but distinct keel on the lower part of the last whorl. The varices are very thin, and bent in near the suture. The shell is finely striated, and prettily marked with flame-like patches of dark colour between the varices. There are two specimens in Mr. Cuming's collection, which were found on sand at Seirra-leona.

91. *SC. SUTURALIS*. (pl. xxxv. f. 120.) *Hinds. Zool. Proc.* 1843.

*T.* elongatâ, imperfortâ, spiraliter minutè striatâ; anfractibus 10, paululùm prominentibus, anticè carinâ tenui cinctis; suturâ distinctâ, cariniferâ; costulis numerosis tenuis, varicibus raris, decumbentibus, vix elevatis: aperturâ rotundâ; margine tenui: colore obscurè albo, in medio anfractuum fusco.

Brought from Mallaca, by Mr. Hinds.

92. *SC. VULPINA*. (pl. xxxv. f. 117, 118. *Hinds. Zool. Proc.* 1843.

*T.* elongatâ, imperforatâ, spiraliter sulcatâ; anfractibus 9 prominentibus, carinâ antice cinctis; varicibus 9, crassis, rotundatis, æqualibus; aperturâ sub-rotundata; labio crasso; colore fusco.

Brought from Mallacca, by Mr. Hinds.

93. *SC. ACUMINATA*. (pl. xxxv. f. 130.) *Sow. Jun. Zool. Proc.* 1844.

*T.* elongatâ, imperforatâ, acuminatâ; anfractibus 15, vix prominentibus, anticè carinâ tenui cinctis; varicibus creberrimis, numerosis, tenuis, curvilineatis; aperturâ ovali, margine tenui, labio interno tortuoso; colore pallide fulvo, fasciis duo, unâ prope suturam pallidâ, unâ in medio anfractuum latâ, distinctâ.

Elongated, keeled, with numerous whorls, and very numerous close set curvilinear varices. In Mr. Cuming's collection, from Malacca.

EXPLANATION OF PLATES XXXII, XXXIII,  
XXXIV, XXXV.

SCALARIA.

(The figure at the end of each name, refers to the species in the text.)

FIG. 1, 2, 3. Sc. Philippinarum, 12.

- 4. — pyramidalis, 9.
- 5. — angulata, 11.
- 6, 7. — tenuis, 18.
- 8. — laxata, 8.
- 9. — marmorata, 5.
- 10, 11. — alata, 3.
- 12, 13. — fasciata, 4.
- 14, 15, 16. — Pallasii, 2.
- 17. — pretiosa, 1.
- 18, 19, 20. — communis, 10.
- 21, 22. — Hyalina,
- 23, 24. — replicata, 6.
- 25, 26. — denticulata, 19.
- 27, 28. — communis, var. 10.
- 29. — muricata, 15.
- 30. — mitraeformis, 16.
- 31, 32. — muricata, 15.
- 33, 34. — gracilis, 14.
- 35, 36, 37. — aculeata, 13.
- 38, 39. — Lyra, 27.
- 40. — irregularis, 29.
- 41. — dubia, 28.
- 42, 43, 44. — trifasciata, 31.
- 45, 46. — lineolata, 32.
- 47. — clathratulus, 52.
- 48. — lineolata, var. 32.
- 49, 50, 51. — lineata, 73.
- 52. — albo-lineata, 68.
- 53. — inconspicua, 30.
- 54. — obtusa, 63.
- 55. — crassa, 34.

FIG. 56, 57. Sc. Imperialis, 34.

- 58. — immaculata, 39.
- 59. — curvilineata, 42.
- 60. — irregularis, 29.
- 61. — turricula, 37.
- 62. — aurita, 36.
- 63. — concinna, 55.
- 64, 65, 66. — fragilis, 20.
- 67. — hexagona, 60.
- 68. — unifasciata, 61.
- 69. — obliqua, 24.
- 70, 71. — obesa, 25.
- 72, 73. — venosa, 26.
- 74. — friabilis, 47.
- 75. — principalis, 23.
- 76. — tenuicostata, 17.
- 77. — Georgettina, 22.
- 78. — Martinii, 40.
- 79, 80. — rari-costata, 41.
- 81, 82. — Lyra, 27.
- 83, 84. — rubro-lineata, 33.
- 85. — Bulbulus, 46.
- 86. — Martinii, 40.
- 87. — bullata, 45.
- 88. — turricula, 37.
- 89. — Turtonis, var.? 70.
- 90. — similis, 44.
- 91. — Mindoroensis, 65.
- 92. — pulcherrima, 58.
- 93, 94. — Catanuensis, 43.
- 95. — creberrima, 56.

- FIG. 96. *Sc. multicostata*, 54.  
 97. — *vestalis*, 38.  
 98. — *connexa*, 57.  
 99. — *polita*, 69,  
 100. — *aciculina*, 67.  
 101. — *glabrata*, 21.  
 102. — *Elenensis*, 62,  
 103. — *magnifica*, 78.  
 104. — *ovalis*, 59.  
 105. — *Greenlandica* 72.  
 106, 7, 8. — *Turtonis*, 70.  
 109. — *gradata*, 66.  
 110. — *Greenlandica*, 72.  
 111. — *sulcata*, 49.  
 112. — *Nov-angliæ*, 50.  
 113, 114. — *bicarinata*, 85.  
 115, 116. — *crassi-labrum*, 87.  
 117, 118. — *vulpina*, 92.  
 119. — *crassicostata*, 83.  
 120. — *suturalis*, 91.  
 121, 122. — *diadema*, 89.

- FIG. 123. *Sc. crenata*, 88.  
 124, 125. — *Dianæ*, 76.  
 126. — *varicosa*, 80.  
 127. — *statuminata*, 77.  
 128. — *varicosa*, 80.  
 129. — *Trevelyana*, 71.  
 130. — *acuminata*, 93.  
 131, 132. — *Clathrus*, 74.  
 133. — *coronata*, 75.  
 134. — *Clathrus*, 74  
 135. — *Australis*, 82.  
 136. — *undulata*, 85.  
 137. — *subtilis*, 51.  
 138. — *fusca*, 90.  
 139. — *porrecta*, 64.  
 140. — *decussata*, 79.  
 141. — *indistincta*, 48.  
 142. — *Cochlea*, 81.  
 143. — *varicosa*, 80.  
 144. — *granulosa*, 84.

Sp. 53, omitted from p. 96.

*Sc. multistriata*. Say. Amer. Journ. Sc. pulchella, *Bivon*!

*T. parvâ*, elongatâ, acuminatâ, imperforatâ, intervaricibus spiraliter tenuiter sulcatis; anfractibus 10, rotundatis, contiguïs; varicibus numerosis lævibus, ad suturam subdentatis, colore albo.

A beautiful little American shell resembling *Sc. clath-ratulus*, but more acuminated, and having minute striæ or ridges between the varices. The specimens from which the annexed cut is taken, were not identified until after the plates were engraved and printed. They are in the collection of Met-calfe, Esq.



# MONOGRAPH OF THE GENUS COLUMBELLA.

BY

G. B. SOWERBY, F.L.S. &c.

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Testa ovata, vel oblonga, nonnunquam turrita, epidermide induta; spirâ plerumque breviusculâ, nonnunquam elongato turritâ; labio externo plûs minûsve incrassato, medianâ parte intûs tumido vel subtumido, denticulato; labio interno plerumque anticè denticulato vel ruguloso.

When I first published some account of this Genus in my work on the Genera of Recent and Fossil Shells, comparatively very few species were known and their general forms more closely approximated to each other; since that period the researches of Naturalists, particularly those of Mr. Cuming have brought to light numerous additions and new forms have contributed to the increase of the Catalogue, now swelled to upwards of an hundred species. The Columbellæ are for the most part small Shells of an ovate or oblong, sometimes of a turreted form covered when in their natural state with an epidermis, which is commonly thin, but in some species is thick and coarse. The spire is usually short, though sometimes of considerable length, and generally acuminate. The outer lip is generally more or less thickened externally, and its middle part within is usually more or less tumid and denticulated, and the inner lip has for the most part various denticles and rugulosities within anteriorly. Aperture in general rather elongated, though sometimes much shorter than the spire and it is usually more or less arched opposite to the swelling within the outer lip, so as to give the aperture a sinuous form. Lamarck's *Col. bizonalis*, *Col. hebræa*, and *Col. unifascialis*, belong to the genus *Mitra*; and we think his *Col. mendicaria* and *Col. zonalis* should be referred to the family of the Purpuridæ. These two last, along with



several others to which I have given the specific names of *livida*, *nigro-punctata* and *pyrostoma* in the Zool. Proc. for June 1832, might form together a very natural subgenus. Upon carefully reading over the descriptions given by Lesson of six species in the Revue Cuvierienne 1842 we have not been able to recognize them, they are named by him, Col. Clathra, Col. buccinoides, (this is quite different from that named by me Col. buccinoides in Zool. Proc. 1832,) Col. ampla, Col. aphthægera, Col. pulicaris and Col. digitalis. Of two species which are given by Quoy, in the Voyage of the Astrolabe, that named lutea is probably a variety of *semiconvexa*, and that named rubicundula may be a variety of *flavida*.

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## DESCRIPTIONS.

### 1. Col. Strombiformis, Lam. (pl. xxxvi, f. 1, 2.)

Col. testâ ovato-turbinatâ, subalatâ, læviusculâ, castaneâ, strigis albis longitudinalibus breviusculis ornatâ; anfractibus 6, tribus ultimis posticè angulatis, ultimo anticè spiraliter striato; spirâ exsertiusculâ, tertiam partem testæ æquante; aperturâ longitudinali, angustâ, flexuosâ, peritremate aurantiaco; plicis columellæ subobsoletis.

Shell ovate-topshaped, somewhat triangular, smooth, chestnut coloured, with short white longitudinal streaks; volutions 6, the three last posteriorly angulated; the last very large, spirally striated anteriorly; spire prominent, equal in length to a third part of the shell: aperture narrow, flexuous, with an orange coloured border; columellar folds rather obsolete.

The last volution is generally longitudinally grooved on the ventral side. Found on the Isle of Muerte, West Columbia, H. Cuming.

### 2. Col. major, Sow. (pl. xxxvi, f. 3, 4, 6.) Zool. Pr. ii. 119.

Col. testâ ovatâ, medio gibbosâ, castaneâ, albido punctulatâ; spirâ breviusculâ, pyramidali, apice acuto; anfractibus 6—7 lævigatis, ultimo maximo, supernè rotundato-turgido, infrâ spiraliter sulcato; aperturâ elongatâ, flexuosâ, albâ, supernè angulatâ; labio externo supernè obtusè angulato albo, intus denticulato; labio columellari supernè callifero, infrâ plicato-rugoso.

Shell ovate, gibbous in the middle, chestnut coloured, with

white dots; spire rather short, pyramidal, acute; volutions 6—7, smooth, the last very large, rounded and turgid, spirally grooved anteriorly; aperture elongated, flexuous, white, angular posteriorly; outer lip posteriorly bluntly angular, toothed within; columellar lip posteriorly calliferous, anteriorly rugose with small plaits: the posterior part of the outer lip is usually white.

This well known species has commonly been regarded as *Col. Strombiformis* Lam. It is however easily distinguished from that species. We have represented at f. 6, a small and more slender variety.

Found under stones on the Shores of South America, H. Cuming.

3. *Col. hæmastoma* Sow. (pl. xxxvi. f. 5.) Z. P. ii. p. 116.

*Col. testâ oblongâ, lævigatâ; apice acuminato; anfractibus 7—8, castaneis, albo-maculatis, ultimi dorso nigro, infra castaneo; aperturâ elongatâ, flexuosâ; labio externo extûs incrassato, supernè prominente, albo; peritremate aurantiaco; labio interno intûs denticulato; columellâ unituberculatâ.*

Shell oblong, smooth, apex acuminate; volutions 7—8, chestnut coloured, spotted with white, the back of the last volution black, chestnut in front; aperture elongated, flexuous; outer lip thickened externally, prominent and white posteriorly; peritreme orange coloured; inner lip toothed within; columella with a single irregular tubercle.

Found under stones on the Shores at Panama and the Gallapagos Islands, H. Cuming.

4. *Col. castanea* Sowb. (pl. xxxvi. f. 7. 11.) Z. P. ii. 118.

*Col. testâ ovato-oblongâ, castaneâ, punctulis albis conspersâ; spirâ breviusculâ, acuminatâ; anfractibus 5, supernè anguliferis, ultimo magno ad basin spiralitèr sulcato; aperturâ elongatâ, flexuosâ, supernè angulosâ; peritremate aurantiaco; labio externo intûs denticulato, interno supernè callifero, medio albo, eroso, infra plicato-rugoso.*

Shell oblong-ovate, chesnut coloured, with white dots; spire rather short, acuminate; volutions five, angular posteriorly, the last large and spirally grooved anteriorly; aperture lengthened flexuous, angular posteriorly; peritreme orange coloured; outer lip toothed within, inner with a posterior callus, middle white, eroded, rough with small plaits in front.

Real Llejos, Central America, H. Cuming.

5. *Col. labiosa*. (pl. xxxvi, f. 8, 9.) Sow. Gen.

*Col. testâ ovato-subtrigonalî, latâ, lævigatâ, fuscâ, albido-punctulatâ, epidermide tenui indutâ; spirâ brevi, acuminatâ, anfractibus 6, ultimis tribus posticè obsoletè unisulcatis, ultimo anticè sulcis transversis obsoletiusculis nonnullis, posticè rotundato-angulato; aperturâ longitudinali, flexuoso; labio externo extûs margine acutiusculo, fusco, intûs albo, varice longitudinali denticulato; labio interno posticè callifero, anticè intûs tuberculo oblongo columellari instructo, medio eroso.*

Shell ovato-subtriangular, broad, smooth, fuscous, with whitish dots and transverse blackish close-set slender lines, covered with a thin epidermis; spire short, acuminate, with six volutions, of which the three last have an obsolete posterior groove and the last is posteriorly rotundato-angular and furnished anteriorly with several rather obsolete transverse grooves; aperture longitudinal, flexuous; outer lip externally with a rather sharp fuscous border, white within, with a longitudinal denticulated varix; inner lip posteriorly callous and furnished within with an oblong columellar tubercle in front.

Found abundantly at St. Elena, W. Columbia, H. Cuming.

6. *Col. Harpiformis*. Sow. (pl. xxxvi, f. 10, 12.) Z. P., Part ii. p. 113.

*Col. testâ ovato-subtrigonâ, nigrâ, albido-maculatâ; epidermide tenui fulvâ indutâ; spirâ brevi; anfractibus 6—7, marginibus crenulatis, ultimo trigonali, longitudinaliter costato; aperturâ elongatâ, supernè in canalem elongatam productâ; labio externo incrassato, inflexo, intûs denticulato; canali sub-recurvâ.*

Shell ovate sub-triangular black, speckled with whitish and furnished with a thin fulvous epidermis; spire short, of 6 or 7 volutions, with crenulated edges; last volution triangular, longitudinally ribbed; aperture elongated and produced into a lengthened canal posteriorly; outer lip thickened, inflected, internally denticulated; canal slightly recurved.

Found on dead shells in the Bay of Panama, at a depth of ten fathoms, H. Cuming.

7. *Col. uncinata* Sow. (pl. xxxvi, f. 13, 14.) Z. P. ii. 114.

*Col. testâ oblongâ, utrinque acuminatâ, fulvâ, fasciâ centrali albido-articulatâ; anfractibus 6—7, superioribus parvis, sub-*

nodulosus; ultimo maximo, supernè angulato; aperturâ longitudinali, elongatâ, flexuosâ, supernè in canalem brevem uncinatam porrectâ; labio externo incrassato, intus denticulato; denticulis confertis; labio interno granuloso.

Shell oblong, acuminate at both ends, fulvous, with a central band articulated with whitish; volutions six or seven, of which the first are small, subnodulose, and the last very large and angular behind; aperture longitudinal, elongated, flexuous, produced posteriorly in a short, hooked canal; outer lip thickened, toothed within; teeth close set; inner lip granular.

Found on the Island of Muerte and in the Bay of Guayaquil. H. Cuming.

8. *Col. Duclosiana* nob. (pl. xxxvi f. 15, 16.)

Col. testâ ovatâ, utrinque acuminatâ, longitudinaliter costellatâ, saturatè fuscâ, zonis binis pallidioribus; spirâ acuminatâ, anfractibus 5, costatis, ultimi magni parte ventrali longitudinaliter costato, interstitiis costarum transversim striatis, dorsali lævigatâ, anticè transversim striatâ; aperturâ latiusculâ, flexuosâ, nigricante; labio externo crasso, intus denticulis 2—9, posticis majoribus; interno posticè califero; canali breviter acuminato, sub-reflexo; epidermide crassiusculâ.

Shell ovate, acuminate at both ends, with small longitudinal ribs, of a deep fuscous colour, with two paler zones: spire acuminate, with five ribbed volutions; the last volution large, its ventral part longitudinally ribbed, with the interstices of the ribs transversely striated, its dorsal part smooth, transversely striated in front; aperture rather broad, flexuous, blackish; outer lip thick, with from 8—9, small teeth within, of which the posterior are the largest; inner lip with a posterior callosity; canal shortly acuminate, sub-recurved.

Epidermis coarse and rough: found under stones on the coast of Malacca; H. Cuming; also from Java.

9. *Col. chlorostoma*, nob. (pl. xxxvi, f. 17, 18.)

Col. testâ ovatâ, longitudinaliter costatâ, lævi, albâ, nigro-maculatâ; spirâ mediocre, anfractibus 5, sub-ventricosus, costatis, ultimo anticè transversim striato, parte dorsali anticâ costis obsoletis; aperturâ oblongâ, latiusculâ, peritremate fulvescente; labio externo posticè angulato.

Shell ovate, longitudinally ribbed, smooth, white with black specks; spire of moderate length, with 5 rather ventri-



cose costated volutions, the last transversely striated in front and with obsolete ribs on the front of the dorsal part; aperture oblong, rather broad, with a slightly fulvous peritreme; outer lip angular behind.

A single specimen is in the collection of Mr. Petit de la Saussaye, which he has obligingly communicated. It is not *Buccm. chlorostoma* of Wood.

10. *Col. rustica*. Lam. (pl. xxxvi. f. 19, 22, 24.)

*Col. testâ ovato-turbinatâ, lævi, albo-castaneoque reticulatâ, prope suturas maculis albis angularibus stellatis ornatâ; spirâ breviusculâ, acutiusculâ, anfractibus 7, sub-ventricosis, ultimo magno, plerumque transversim striato; labio externo intûs denticulis albis, interstitiis plerumque fuscis.*

Shell ovate turbinated, smooth, chesnut coloured, reticulated with white, and ornamented with white angular stellate spots near the suture; spire rather short and sharp pointed, with 7 rather ventricose volutions, the last of which is large and usually transversely striated: outer lip with small white teeth within whose interstices are usually blackish brown.

This species, which is common in the Mediterranean, varies greatly in its proportions as well as in its colourings; *C. acuminata* of Nuttall, from Fayal, does not appear to differ from the more acuminated varieties of the coast of Sicily, of which a representation is given by Philippi. The hairy epidermis distinguishes this species from *Col. fuscata*.

We believe that several of its varieties have been elevated to the rank of species by Duclos, Kiener and others.

11. *Col. fuscata*. Sow. (pl. xxxvi. f. 21. 25.) Z. P. ii. p. 117.

*Col. testâ ovato-acuminatâ, medio ventricosâ, castaneâ, albido-guttulatâ, epidermide fusca, lævi, indutâ; spirâ acuminatâ: anfractibus 7, ultimo maximo; aperturâ elongatâ flexuosâ; peritrematis albidi aut violacei medio intûs denticulato; columellæ dimidio inferiore denticulato.*

Shell ovate, acuminated, ventricose in the middle, of a chesnut colour with little white specks, covered with a smooth fuscous epidermis, spire acuminated: volutions 7, the last very large; aperture elongated, flexuous; peritreme whitish or violaceous, denticulated in the middle within; lower half of the columella denticulated.

Common under stones at Panama, St. Elena and Monte Christe, H. Cuming.

12. *Col. reticulata*. Lam. (pl. xxxvi. f. 23. 26.)

*Col. testâ ovato-turbinatâ, lævi, albâ, lineis spadiceis reticulatâ; spirâ brevi, obtusâ, anfractibus 5, turgidis, ultimo magno, anticè transversim striato; aperturâ angustiori, flexuosâ, dentibus labii externi et plicis columellæ obsoletiusculis.*

Shell ovate, turbinated, smooth, white reticulated with brown lines; spire short, obtuse, volutions 5, swelled, the last large and transversely striated in front; aperture rather narrow, flexuous; teeth of the outer lip and rugosities of the columella rather indistinct.

This species varies in its colouring, some specimens being fulvous.

From Brazil, in Mr. Cuming's collection.

13. *Col. festiva*. Kiener. (pl. xxxvi f. 20, 27.)

*Col. testâ ovatâ, albidâ, lævi, apice breviter acuminato, obtuso nigricante; spirâ mediocri, anfractibus 5, ultimis duobus posticè albidis, ultimo albido castaneo-maculato; aperturâ flexuosâ, peritremate albo, denticulis columellæ validis.*

Shell ovate, whitish, smooth, apex short, acuminate, obtuse, blackish; spire of middling length, volutions 5, the two last whitish posteriorly, the last whitish spotted with chesnut colour, and usually with a row of white specks a little in front of the suture; aperture flexuous; peritreme white, teeth of the columella distinct.

Brought from Acapulco by H. Cuming.

14. *Col. mercatoria*. Lam. (pl. xxxvi. f. 28—32.)

*Col. testâ subovali, crassiusculâ, coloribus variis pictâ, spirâ brevi, sub-acuminatâ, apice acutiusculo, anfractibus 5 ad 6, spiraliter sulcatis, primis interdum longitudinaliter subcostatis, ultimo maximo, posticè sub-angulato, deinde ventricosiusculo, demum subcoarctato, obtuso; aperturâ  $\frac{2}{3}$  longitudinem testæ æquante, subsinuosâ; labio externo internè validè denticulato; margine externo columellæ ad basin denticulis 6 ad 7, interno denticulis 2 ad 3, antico majori: labio externo posticè reflexo.*

Var. *Monstrosa*, spirâ productâ, Sow. Gen. No. ix.

Shell nearly oval, thick, variously coloured; spire short, slightly acuminate, apex sharpish, volutions 5 to 6, spirally grooved, several of the first being sometimes longitudinally but slightly ribbed, the last very large, posteriorly subangular, then subventricose, at length somewhat contracted, obtuse; aperture two-thirds of the length of the shell, somewhat

sinuous; outer lip internally strongly denticulated; outer edge of the columella with 6 or 7 little teeth at the base, inner edge with 2 or 3 of which the anterior is the larger; outer lip posteriorly reflected.

A very common West Indian species; it varies greatly in colour, and sometimes also in form, we have figured a variety with the spire unusually acuminate from Mr. Stainforth's collection. Some varieties of this Shell appear to have been regarded as distinct species by Kiener.

15. *Col. rudis*. *Nob.* (pl. xxxvi. f. 33, 34, 35.)

*Col. testâ oblongâ, rudi, plerumque albidâ, punctis strigisque irregulariter ornatâ; spirâ longiusculâ, acutiusculâ, anfractibus 7, transversim crassè granuloso-striatis, posticè anguliferis, ultimo magno; aperturâ sub-flexuosâ albâ, peritremate posticè angulifero; canali sub-reflexo.*

Shell oblong, rough, usually whitish, irregularly ornamented with dots and stripes; spire rather long and sharp-pointed, volutions 7, with thick transverse granular striæ, posteriorly angular, the last large; aperture rather flexuous, white; peritreme angular posteriorly; canal sub-reflected.

Two varieties are figured from Nevis; in Mr. Cuming's and other collections.

16. *Col. Paytensis* Lesson. spurca *Sow.* (pl. xxxvi. f. 36, 37.) *Z. P.* Part ii. p. 113.

*Col. testâ oblongâ, castaneâ, albido maculatâ, et guttatâ, spirâ acuminatâ; anfractibus 7, posticè, angulatis, ultimo ventricosus, infrâ spiraliter sulcatus; aperturâ latâ, oblongâ, intùs violascente, supernè angulatâ; labio externo sub-flexuoso, sub-incrassato, intùs denticulato; columellâ infrâ unituberculatâ; labii interni margine ad basin denticulis 6.*

Shell oblong, chestnut coloured with whitish spots and specks; spire acuminate, volutions 7, posteriorly angular, the last ventricose, spirally sulcated anteriorly; aperture oblong, broad, internally violaceous, angular posteriorly; outer lip rather flexuous and thickened, denticulated internally; columella with one tubercle at the lower part; edge of the inner lip with six small teeth at its base.

Common under stones on the coast of Peru; inner Lobos Island, H. Cuming.

17. *Col. Turturina* *Lam.* (pl. xxxvii. f. 38, 39, 40.)

*Col. testâ brevi; crassiusculâ, lævigatâ, albicante, maculis variis aurantiaco-brunneis pictâ; spirâ brevi; sub-mucronatâ;*

prope apicem granosâ; anfractu ultimo maximo, lævi, ad basin et propè externam partem labii externi transversim sulcato; aperturâ subsinuosâ, purpurascente roseâ, ad basin columellæ denticulis parvis 5 externis, internis duobus validis.

Variat sulcis labii externi obsoletis. Variat testâ parvulâ, spirâ acuminatiusculâ.

Shell short, thickish, smooth, whitish, variously spotted with orange brown; spire short, somewhat mucronated, granose toward the apex; last volution very large, smooth, transversely grooved at the base, and at the outer part of the outer lip: aperture somewhat sinuous, rose-purple colour: with five little teeth at the base of the outer edge of the columella, and two more distinct at the inner edge.

From Masbate and Dumaguette, H. Cuming.

18. *Col. versicolor* Sow. (pl. xxxvii. f. 41—46.) Z. P. ii. 119.

*Col. testâ* ovatâ, medio ventricosâ, pallidâ, coloribus variis pictâ; spirâ acuminatâ; anfractibus 6, supernè rotundato-angulatis; suturâ profundâ; aperturâ supernè angulosâ, peritremate intûs denticulato, columellæ denticulis internis duobus prominentibus.

Shell ovate, ventricose in the middle, pale and variously coloured, and mottled with dark colours; spire acuminated, volutions 6, rounded, angular posteriorly; suture deep; aperture angular posteriorly; peritreme denticulated within; columella with two prominent teeth within.

One of the most variable species, particularly in its colouring. Worn specimens of one of its varieties, constitutes Lamarck's *Col. scripta*.

Found at Annaa or Chain Island, H. Cuming. Also found at Siquijor, H. C.

19. *Col. varians* Sow. (pl. xxxvii. f. 47—50.) Z. P. ii. p. 118.

*Col. testâ* ovatâ, medio ventricosâ, albidâ, coloribus variis pictâ; spirâ breviter pyramidali; anfractibus 4—6, spiraliter sulcatis, supernè sub-angulatis, noduliferis; aperturâ angustâ, flexuosâ, peritremate surperne angulato intus denticulato; labio externo propè basin denticulato; columellæ dentibus tribus, parvis.

Shell ovate, ventricose in the middle, whitish, variously coloured, spire short, pyramidal, volutions 4—6, spirally grooved, posteriorly sub-angular, nodulous; aperture narrow, flexuous, peritreme angular posteriorly, denticulated within;



outer lip denticulated near the base; columella with three small teeth.

A very pretty species, exceedingly variable in its colouring.

Found in the Gallapagos Islands, H. Cuming. Numerous specimens were brought by the Endeavour, Capt. Cook.

20. *Col. pæcila* nob. (pl. xxxvii. f. 51, 52.)

*Col. testâ* ovatâ, utrinque subacuminatâ, transversim striatâ, fulvâ, lineis 2—3 transversis castaneis, maculisque albis variegatâ; anfractibus 5—6, posticè subcoronatis, ultimo magno, subtrigonalis; aperturâ latiusculâ, flexuosâ, labii externi medio subcoarctato.

Shell ovate, slightly acuminate at either end, transversely striated, fulvous, with 2 or 3 transverse chesnut lines and varied with white spots; volutions 5—6, posteriorly subcoronated, the last large, somewhat triangular; aperture rather broad, flexuous; middle of the outer lip slightly contracted.

Two specimens only were brought from Matnog, by H. Cuming.

21. *Col. bidentata* Menke. (pl. xxxvii. f. 53, 54.)

*Col. testâ* oblongâ, lævigatâ, pallescente, strigis maculisque castaneis undatis punctisve albis ornatâ; spiræ apice nigricante; anfractibus 6, posticè subnodulosus, ultimo magno, anticè transversim striato; aperturâ latiusculâ, labio externo extûs striato, interno denticulis externis 8—9, internis 2—3; canali latiusculo.

Shell oblong, smooth, pale ornamented with chesnut spots, and wavy streaks and white dots; apex of the spire blackish; volutions six, slightly nodular posteriorly, the last large, transversely striated in front; aperture rather broad; outer lip striated externally; inner lip with 8 or 9 small teeth on the outer edge, and 2 or 3 on the inner edge, and a pale violaceous spot in the middle; canal rather broad.

A very graceful species, brought lately from the Swan River.

22. *Col. flavida* Lam. (pl. xxxvii, f. 55, 56, 57.) *Buc. flavum* Brug.

*Col. testâ* oblongâ, lævi, aurantiacâ, albo-maculatâ et punctatâ; spirâ productâ, sub-mucronatâ, anfractibus 7—8, subcylindræis, posticè propè suturam maculis albis ornatâ, ultimo anticè transversim sulcato, medio punctulis albis adperso; suturâ validâ; aperturâ longitudinali, breviusculâ, intus roseâ vel purpureâ, flexuosa, labio externo varice crasso instructo, extus costellis transversis medianis, margine flexuoso tenuiusculo, acutiusculo intûs denticulato; labio interno læ-

mellam levatam columellarem efformante; canali brevi, reflexo.

Shell oblong, smooth, orange coloured with white spots and dots; spire produced, sub-mucronated; volutions 7—8, sub-cylindrical, posteriorly spotted with white near the suture; last volution transversely grooved in front, sprinkled with white dots in the middle suture distinct; aperture longitudinal, rather short, flexuous, rose coloured or purplish within; outer lip thickly varicose, with little transverse ridges toward the middle externally, its margin flexuous, rather thin and sharp, denticulated within; edge of the columellar lip slightly raised; canal short, reflected.

A common and variable species, particularly in its colouring. Its epidermis is rather rough. We have figured several varieties. By mistake this has been called *C. semipunctata* in my work on the Genera of Shells.

23. *Col. semipunctata*. Lam. (pl. xxxvii. f. 58 — 61.)  
*Buccm. punctatum* Brug.

*Col. testâ ovato-turbinatâ, lævi, castaneâ, albo maculatâ, spirâ brevi, mucronatâ, anfractibus 7—8, brevibus, albo-castaneoque articulatis, ultimo magno, versus anticam partem attenuato, posticè castaneo-alboque articulado, medianè castaneo albidoque punctulato, anticè transversim sulcato; aperturâ elongatâ, sub-flexuosâ, posticè canalem angustam instructâ, intùs violascente; labio externo extùs crasso, margine antico tenuiusculo, extùs transversim striato; labio interno anticè laminam levatam columellarem instructo; canali brevi, reflexo.*

Shell ovate turbinated, smooth, chestnut coloured with white spots; spire short, mucronated; volutions 7—8, short, alternately white and chestnut spotted, the last large, anteriorly attenuated, posteriorly alternately white and chestnut spotted, chestnut in the middle, with white dots, anteriorly transversely grooved; aperture elongated, sub-flexuous, posteriorly with a narrow canal, violaceous within; outer lip externally thick, its anterior margin thin, outwardly transversely striated; columellar lip slightly raised anteriorly; canal short, reflected.

This species also varies much in its colouring; we have a specimen quite white.

Philippine Islands, H. Cuming.

24. *Col. Tringa. nob.* (pl. xxxvii. f. 62.) *Mitra* Lam.

*Col. testâ oblongâ, lævi, albâ, maculis inæqualibus, angularibus, ferrugineis pictâ, apice acuminato; spirâ sub-elongatâ,*

anfractibus 8—9, ultimo anticè transversim sulcato; aperturâ longitudinali, sub-flexuosâ; labii externi crassi margine antico tenuiusculo; labio interno lamellam levatam columellarem instructo; canali brevi, sub-reflexo.

Shell oblong, smooth, white, with unequal angular rusty spots, apex acuminate; spire rather elongated, volutions 8—9, the last transversely sulcated in front; aperture longitudinal, sub-flexuous; anterior edge of the thickened outer lip rather thin; edge of the columellar lip slightly raised anteriorly; canal short, somewhat reflected.

Very nearly related to *Col. flavida*. It appears to be very rare as we have only seen two specimens in Mr. Cuming's collection. Lamarck says it is found in the Mediterranean. We suspect it belongs to the South Seas.

25. *Col. obtusa*. Sow. (pl. xxxvii, f. 63, 64.) Z. P. ii. p. 117.

*Col. testâ oblongâ, sub-cylindricâ, lævi; anfractibus 8, albicantis, castaneo-maculatis, maculis angulatis, sub-trapeziformibus; anfractu ultimo ad basin sulcato.*

Shell oblong, sub-cylindrical, smooth; volutions 8, whitish, with angular, somewhat trapeziform chestnut spots; last volution grooved at the anterior part; apex obtuse.

Found at Huaheine, one of the Society Islands, H. Cuming.

26. *Col. splendidula, nob.* (pl. xxxvii. f. 65. 66.)

*Col. testâ oblongâ, lævi, aurantiacâ, maculis albis castaneisque variegatâ; spirâ breviusculâ, sub-acuminatâ, anfractibus 7—8, brevibus, ultimo magno, anticè transversim striato; aperturâ sub-flexuosâ, albâ, labio externo extus varicoso, margine tenuiusculo; labio interno anticè laminam levatam columellarem instructo: canali brevi, sub-reflexo.*

Shell oblong, smooth, orange coloured, varied with white and chestnut marks; spire rather short, slightly acuminate; volutions 7—8, short, the last large and transversely striated anteriorly; aperture sub-flexuous, white; outer lip externally varicose, with a thin edge, inner lip with a slightly raised lamina anteriorly; canal short, slightly reflected.

Found in coarse sand, at a depth of seven fathoms, near the Island of Corrigedor, Bay of Manilla, by H. Cuming.

27. *Col. ovulata* Lam. (pl. xxxvii. f. 67, 68, 69.)

*Col. testâ ovato-oblongâ, lævi, transversim tenerimè striatâ, vel ferrugineâ, vel castaneâ, vel nigrâ maculis albis irregularibus sparsis ornatâ; spirâ brevi, mucronatâ; anfractibus*

7—8, ultimo maximo, anticè attenuato, transversim striato; labio externo extùs incrassato, margine tenui, intùs denticulis 3 vel 4 medianis; labio interno laminam sub-levatam columellarem efformante; aperturâ elongatâ, sub-flexuosâ; canali brevi, latiusculo, sub-reflexo.

Shell oblong-ovate, smooth, very finely striated transversely, of a rusty or chesnut or black coloured, sprinkled with whitish irregular spots; spire short, mucronated; volutions 7—8, the last very large, attenuated anteriorly and transversely striated, outer lip externally thickened, its edge thin, with 3 or 4 small teeth in the middle within; inner lip with a slightly elevated columellar lamina; aperture elongated, sub-flexuous; canal short, rather broad and slightly recurved.

28. Col. obscura. *Nob.* (pl. xxxvii. f. 70, 71.)

Col. testâ oblongâ, lævi, obscurè fulvâ, strigis longitudinalibus nigris, spirâ sub-acuminatâ, anfractibus 7, posticè albonigroque articulatis, ultimo anticè transversim sulcato; labio externo sub-incrassato, margine acutiusculo, intùs medianè dentibus 3—4 obsoletis; interno anticè laminam levatam collumellarem efformante; canali brevi sub-reflexo

Shell oblong, smooth, of a dull fulvous colour, with irregular longitudinal black stripes; spire slightly acuminate; volutions 7, posteriorly alternately white and black spotted, the last transversely striated anteriorly; outer lip slightly thickened, with a sharpish edge and with 3 to 4 obsolete teeth in the middle within; inner lip and canal-like *C. ovulata*.

North West coast of New Holland, Mr. Cuming's Collection.

29. Col. nitidula. *Sow. Genera. Lam.* (pl. xl. f. 162.)

Col. testâ ovato-oblongâ, lævi, nitidâ, albicante, brunneo-marmoratâ, spirâ ad apicem acutiusculâ, anfractibus 6, pauxillum ventricosis, ultimo maximo,  $\frac{3}{4}$  longitudinis testæ æquante; aperturâ elongatâ, sinuosâ, angustiori, dentibus internis labii externi circa 12, interstitiis nigricantibus.

Shell oblong-ovate, smooth, shining, whitish marbled with brown; spire rather sharp at the apex, with six very slightly ventricose volutions, the last of which is very large and equal in length to  $\frac{3}{4}$  of the shell; aperture elongated, sinuous, rather narrow; internal teeth of the outer lip about 12, with blackish interstices.

This very common species is the *Buccm. nitidulum* *Lin.* and the *Columbella nitida* *Lam.* Linné has confounded our



Col. concinna with it. From Nevis and other West Indian Islands.

30. Col. marmorata Gray in Beechey p. 129. pl. xxxvi. f. 129. (pl. xxxvii. f. 72, 73.)

Col. testâ oblongâ, utrinquesub-acuminatâ, lævi, ferrugineâ, albo-maculatâ et punctatâ; spirâ sub-mucronatâ, anfractibus 7---8, ultimo transversim striato, labio externo sub-incrassato, intûs denticulis 8---9; labio interno anticè laminam columellarem sub-obsoleteam instructo; canali brevi, subreflexo.

Shell oblong, slightly acuminate at either extremity, smooth, rust coloured, dotted and spotted with white; spire slightly mucronated, volutions 7---8, the last transversely striated, outer lip somewhat thickened with 8 or 9 small teeth within, inner lip with a slight columellar lamina; canal short sub-reflected.

Found on the reefs at the Island of Capul, H. Cuming.

31. Col. Philippinarum Reeve. (pl. xxxvii. f. 74, 75, 76.)

Col. testâ ovato-turbinatâ, lævi, albâ, nigro-undatim variegatâ, spirâ breviter conicâ, anfractibus 7, ultimo maximo, posticè rotundato-angulato, anticè conico, basi transversim striato; labii externi medio crassiusculo, denticulato, labio interno laminam sub-levatam columellarem efformante; canali reflexo.

Shell ovate, turbinated, smooth, white, varied with waved black marks; spire short, conical, volutions 7, the last very large, rounded angular posteriorly, conical anteriorly, base transversely striated; middle of the outer lip thickish, denticulated, inner lip forming a slightly elevated columellar laminar; canal reflected.

Several varieties were found at Puteao, in the Island of Lûgon, by H. Cuming. It may be the Col. epamella of Duclos, but we gladly avail ourselves of Mr. Reeve's name in preference to the nonsense name given by Duclos.

32. Col. corniformis nob. (pl. xxxvii. f. 77, 78.)

Col. testâ ovato-turbinatâ, lævi, pallidâ, coloribus variis pictâ; spirâ breviter conicâ, anfractibus 7, primis sex medio obtusè angulato, marginibus prope suturam levatiusculis; ultimo anfractu magno, elongato-conico, anticè transversim striato; labio externo tenuiusculo, intûs denticulis plurimis; canali sub-reflexo.

Shell ovate, turbinated, smooth, pale, ornamented with

various coloured markings; spire short, conical, volutions 7, the 6 first obtusely angular in the middle, their edges near the suture slightly raised; the last volution large, of a lengthened conical form, and transversely striated anteriorly; outer lip rather thin, with many small teeth within; canal slightly reflected.

In Mr. Cuming's collection.

33. *Col. aspersa*; nob. (pl. xxxvii. f. 79, 80.)

*Col. testâ oblongo-ovatâ, lævi, albâ, castaneo-reticulatâ et maculatâ, spirâ sub-acuminatâ, apice obtuso, anfractibus 6, posticè rotundatis, ultimo anticè transversè obsoletè striato, aperturâ latiusculâ, flexuosâ, labio externo intus medianè tuberculato, denticulis obsoletis, margine lævigato; canali latiusculo, brevi.*

Shell oblong-ovate, smooth, white, reticulated and spotted with chesnut colour; spire slightly acuminate with an obtuse apex; volutions six, posteriorly rounded, the last obsoletely transversely striated anteriorly; aperture rather broad flexuous; outer lip tubercular in the middle within, the tubercle rather elongated, with obsolete teeth; margin smooth; canal rather broad, short.

Two specimens are in Mr. Cuming's and one in Lady Harvey's collection, locality unknown.

34. *Col. albina* Kiener (pl. xxxviii. f. 81, 82.)

*Col. testâ oblongo-acuminatâ, lævi, albidâ, coloribus variis ornatâ; spirâ elongatiusculâ, anfractibus 9, breviusculis, sub-cylindraceis, ultimo magno, ante suturam tumidiusculo, posticè nonnunquam sub-tuberculifero; aperturâ breviusculâ, latiuscula; labio externo sub-incrassato, intus denticulato; canali brevi, lato.*

Shell oblong, acuminate, smooth, whitish, ornamented with various colours, spire rather lengthened; volutions 9, rather short, sub-cylindrical, the last large, slightly tumid in front of the suture, sometimes slightly tuberculiferous behind; aperture rather short and broad; outer lip somewhat thickened, denticulated within; canal short, broad.

Found by Mr. Cuming at Puerto-galero, Isle of Mindoro.

35. *Col. Ligula* Ducl. (pl. xxxviii, f. 83, 84, 85.)

*Col. testâ oblongâ, acuminatâ, lævi, albidâ, coloribus variis fasciatim pictâ; spirâ elongatâ, turritâ, anfractibus 8—9, sub-ventricosus, nitidis, ultimo magno; labio externo extus crassiusculo, variciforme, intus denticulato; labio interno anticè laminam levatam columellarem efformante, intus denticulis rugosiusculo.*

Shell oblong, acuminated, smooth, whitish, banded with various colours; spire elongated, turreted, volutions 8—9, slightly ventricose, shining, the last large; outer lip thickened externally, variciform, denticulated within; inner lip forming an elevated columellar lamina in front; rather rough within with small teeth, Found by Mr. Cuming at Ticao.

36. Col. *Fabula*, *nob.* (pl. xxxviii, f. 86, 87.) C. *Padonosta* Ducl.

Col. testâ ovatâ, lævi, pallidâ, coloribus obscuris variis pictâ, spirâ acuminatâ, conicâ, apice acuto, anfractibus 6—7, margine suturali levatiusculo: ultimo magno, anticè transversim striato; aperturâ latâ, labio externo tenuiusculo, posticè sub-emarginato, intûs in mediam sub-tumido, denticulato, canali lato.

Shell ovate, smooth, pale, varied with dull colours; spire acuminated, conical, its apex acute; volutions 6—7, with the sutural edge slightly raised; the last volution large, transversely striated in front; aperture broad, outer lip rather thin, slightly notched behind and somewhat tumid and denticulated within in the middle; canal broad.

A variety has been found under stones in the Bay of Muerte Island of Corrigedor by Mr. Cuming.

37. Col. *Tyleri*, *Gray*, in Griffith's *Cuvier*. (pl. xxxviii, f. 88, 89.) C. *Palmerina* Duclos.

Col. testâ ovato-oblongâ, lævi, albâ, nigro-reticulatâ; spirâ acuminatâ, anfractibus 7, ventricosiusculis, ultimo magno, gibboso, anticè transversim striato; aperturâ latiusculâ, labio externo sub-incrassato, intûs denticulis paucis instructo; labio interno laminam columellarem sub-levatam anticè efformante; canali brevi, lato, sub-reflexo.

Shell oblong, ovate, smooth, white, reticulated with black, spire acuminated, volutions 7, slightly ventricose, the last large, gibbous, transversely striated in front; aperture rather broad, outer lip somewhat thickened, with a few internal teeth; inner lip forming a slightly elevated anterior columellar lamina; canal short, broad, slightly reflected.

38. Col. *Pardalina*, *Lam.* (pl. xxxviii, f. 90, 91, 92.)

Col. testâ ovatâ, lævi, albâ maculis reteformibus nigris ornâtâ, spirâ breviusculâ, anfractibus 6—7, brevibus, ultimo magno, anticè transversim striato; labio externo crasso, extûs transversim striato, intûs in mediam tumido denticulato; aperturâ angustiori, flexuosâ, labio interno tenui, suprâ columellam anticè levato; canali brevi, lato.

Shell ovate, smooth, white, reticulated with black, spire rather short, volutions 6—7, short, the last large, transversely striated in front, outer lip thick, transversely striated externally, tumid and denticulated in the middle within; aperture rather narrow, flexuous, inner lip thin, raised upon the columella in front: canal short, broad.

Brought from the Island of Guimaras and from Ticao, by H. Cuming.

39. *Col. Vulpecula*, *nob.* (pl. xxxviii, f. 93.)

*Col. testâ ovatâ, crassâ, lævi, albidâ, ferrugineo marmoratâ; spirâ sub-acuminatâ, anfractibus 6—7, ultimo magno, leviter transversim striato, anticè striis validioribus; labio externo crasso, extûs transversim striato, intûs in mediam tumido, denticulato; aperturâ flexuosâ, canali lato, brevi.*

Shell ovate, thick, smooth, whitish, marbled with rust colour; spire slightly acuminate, volutions 6—7, the last large, slightly transversely striated, the anterior striæ more distinct; outer lip thick, transversely striated externally, tumid and denticulated in the middle within; aperture flexuous, canal broad, short.

40. *Col. fulgurans*, *Lam.* (pl. xxxviii, f. 94, 95, 96.)

*Col. testâ ovatâ, crassâ, lævi, nigrâ, strigis albis vel punctulis ornatâ; spirâ breviusculâ, acuminatâ, anfractibus 8—9, sub-convexis, ultimo magno, propè suturam validam rotundato, aperturâ sinuosâ, callo interno denticulato labii externi prominente; canali brevissimo.*

Shell ovate, thick, smooth, black, with white streaks or dots; spire rather short, acuminate; volutions 8—9, rather convex, the last large and rounded near the distinct suture; aperture sinuous, internal denticulated callus of the outer lip prominent; canal very short. It is sometimes of an orange colour with white spots and streaks.

Found under stones at low water on the Island of Guimaras, and in many other places in India.

It will be observed that we have considered Lamarck's *Columbella fulgurans* and *punctata* as mere varieties of one species: we have represented both.

41. *Col. flexuosa*. (pl. xxxviii, f. 97.) *Buccm. flexuosum*, *Lam. Kiener*, *Buccm.* p. 44.

*Col. testâ oblongâ, crassâ, lævi, albicante, lineis flexuosis, longitudinalibus castaneis pictâ; spirâ acuminatâ, anfractibus 7, serie unicâ tuberculorum instructis; aperturâ ovato-*



oblongâ, intûs albâ; labii externi denticulis internis paucis, distantibus.

Shell oblong, thick, smooth, whitish, with longitudinal chesnut coloured flexuous lines; spire acuminate, volutions 7, furnished with a single row of small tubercles; aperture oblong-ovate, white within, internal teeth of the outer lip few and distant.

Kiener's French description and his figure do not agree, but his figure accords with the character given by Lamarck, who does not mention any tubercles, nevertheless, the only specimen we have seen, and which was obtained by Mr. Cuming, from Lamarck's collection, possesses these tubercles, and in other respects accords with Lamarck's character: we judge from these circumstances, that there are two varieties, one with tubercles, and the other without.

42. Col. *Terpsichore*, *Leathes*. (pl. xxxviii, f. 98, 99.)

Col. testâ oblongâ, crassiusculâ, costellatâ, albicante, maculis strigilisque fuscis concinnè ornatâ, spirâ pyramidalî, sub-acuminatâ, apice obtusiusculo; anfractibus 6, lævibus, primis longitudinaliter costellatis, ultimo primum costellato, deinde lævigato, postice tuberculis parvis instructo, ad basin spirâliter tenuiter sulcato; aperturâ latiusculâ, labio externo intûs tantùm denticulato, (nullo modo tumido) rugis ad basin columellæ parvis.

Shell oblong, thickish, with little ribs, whitish with little specks and streaks of fuscous; spire pyramidal sub-acuminated, its apex rather obtuse: volutions 6, smooth, the first longitudinally costellated, the last costellated at its commencement, then smooth and furnished posteriorly with small tubercles, slightly transversely grooved in front; aperture rather broad, outer lip only denticulated, (not tumid) within; rugosities at the base of the columella small.

From Nevis, W. Indies, H. Cuming.

43. Col. *Boivinii*, *Kiener*. (pl. xxxviii, f. 100.)

Col. testâ ovatâ, crassâ, lævi, nigra, albo-guttatâ; apice acuminato, anfractibus 6—7, brevibus, tribus ultimis posticè tuberculatis; ultimi magni parte ventrali nonnunquam rugis nonnullis instructo; aperturâ latiusculâ, posticè angulatâ, intûs albâ; margine interno labii externi fusco, denticulato.

Shell ovate, thick, smooth, black, dotted with white; apex acuminate, volutions 6—7, short, the three last posteriorly tuberculated; the ventral part of the last, which is large, is sometimes furnished with a few wrinkles; aperture rather

broad, angulated posteriorly, white within; inner margin of the outer lip fuscous, denticulated. From the Gulf of Nocoia, Central America, R. B. Hinds, Esq.

44. *Col. corniculata* (pl. xxxviii. f. 101, 102.) *Bucc. corniculatum* Lamarck, Kiener; *Buccm. Linnæi* Payrad.

*Col. testâ oblongo-conicâ, angustâ, lævi, nitidâ, pallidâ, variè maculatâ et strigatâ, apice acuminato; anfractibus 8, planulatis, connatis; aperturâ brevi, latiusculâ, plerumque aurantiacâ, labio externo sub-incrassato, intùs denticulato, denticulis medianis majoribus, canali brevissimo.*

Shell oblong, conical, narrow, smooth, shining, pale coloured, variously spotted and streaked; apex acuminated; volutions 8, flat-sided, lying close at the sutures; aperture short, rather broad, generally orange coloured, outer lip somewhat thickened, denticulated within, the middle teeth being the largest; canal very short.

This species which is the *Buccm. corniculatum* of Lamarck and Kiener, has been named *Buccm. Linnæi* by Payradeau. It is a common species in the Mediterranean and very variable in its colouring.

45. *Col. semiconvexa*. (pl. xxxviii. f. 103, 104.) *Buccm. Lam.*

*Col. testâ ovato-subulatâ, crassiusculâ, lævi, pallidâ, strigis irregularibus castaneis ornatâ, spirâ acuminatâ, anfractibus 8, sub-planulatis; aperturâ brevi latiusculâ, anticè effusâ, labio externo intùs sub-incrassato, denticulato: anfractu ultimo anticè transversim striato.*

Shell ovate-subulate, thickish, smooth, pale with irregular chestnut stripes, spire acuminated, volutions 8, flattish; aperture short, rather broad, anteriorly effuse; outer lip somewhat thickened within, denticulated; last volution transversely striated in front.

From Port Lincoln, Australia, Lamarck and Kiener have placed it with the *Buccina*; it varies much in size and colouring, and approximates in general character to *Col. corniculata* (*B. Linnæi* Payr.)

46. *Col. Zebra* Gray (pl. xxxviii. f. 105.)

*Col. testâ oblongâ, pyramidali, lævi, pallidâ, castaneo-stri-gilatâ, spirâ subacuminatâ, anfractibus 6, subconvexis, apice obtusiusculo; aperturâ latâ, labio externo intùs subincrassato, denticulis paucis, distantibus.*

Shell oblong, pyramidal, smooth, pale, streaked with chestnut

colour; spire somewhat acuminate, volutions 6, rather convex, apex rather obtuse; aperture broad, outer lip slightly thickened within, with a few small distant teeth.

New Zealand; all the specimens we have seen are pierced and have formed a necklace.

47. *Col. fasciata* Sow. (pl. xxxviii. f. 106, 107.) Tank. Cat. No. 2014. App. p. xxv.

*Col. testâ oblongâ, lævi, apice obtuso, basi transversè sulcatâ; anfractibus albido fulvoque variegatis, posticè albis; suturâ validâ, sulco sub-obsoleto propè suturam; columellâ læviusculâ.*

This species is first described in the Catalogue of the Tankerville Collection. On a ticket in Mr. Budgin's hand writing it was called "The white banded and variegated large Olive-nut, from the East Indies; *V. fasciata*." The specimen is in the British Museum, and Mr. Cuming possesses a single specimen of a variety with a few nearly obsolete tubercles toward the posterior part of the last volution. The aperture is large and wide.

Shell oblong, smooth, apex obtuse, base transversely sulcated, volutions varied with whitish and chestnut, white posteriorly; suture distinct; a somewhat obsolete groove posteriorly near the suture; columella nearly smooth.

48. *Col. concinna* Sow. Genera. (pl. xxxviii. f. 108, 109.) *Buccm. lævigatum* Lam.

*Col. testâ oblongâ, albicante, punctulis strigisve fulvis et plerumque vittâ spirali medianâ albo-nigroque articulatâ ornatâ; spirâ pyramidalî, apice acuminato, ætate obtuso; anfractibus 5—7, ventricosiusculis, ultimo maximo posticè sub-angulato, propè suturam albo strigis fulvis interrupto; aperturâ magnâ, latâ, labio externo intus denticulato.*

Shell oblong, whitish, with fulvous dots and streaks and generally ornamented with a white and black spotted middle spiral band, spire pyramidal, apex acuminate, (obtuse with age.) Volutions 5—7, rather ventricose, the last very large and slightly angular posteriorly, white interrupted by fulvous streaks near the suture; aperture large, broad, outer lip denticulated within.

49. *Col. avara*, Say. (pl. xxxviii. f. 110.)

*Col. testâ ovato-oblongâ, fuscescente; spirâ acuminatâ, anfractibus 6, convexiusculis, longitudinaliter costatis, interstitiis creberrimè decussatis, ultimo antice transversim striato;*

aperturâ latâ, denticulis internis labii externi paucis, distantibus : labio interno laminam sub-levatam efformante, margine interno denticulato.

Shell oblong-ovate, fuscous, spire acuminated, volutions 6, rather convex, longitudinally ribbed, with the interstices very delicately decussated; the last volution transversely striated in front; aperture wide, small internal teeth of the outer lip few, and distant; inner lip forming a slightly elevated lamina, its inner edge denticulated. Massachusetts, Dr. Gould.

50. Col. Miser, *nob.* (pl. xxxviii, f. 111.)

Col. testâ ovato-oblongâ, albicante vel lutescente, spirâ pyramidali, anfractibus 6, convexiusculis anticè castaneo maculatis, posticis quinque longitudinaliter costatis, antico costato, sed costis dorsalibus anticè evanidis; aperturâ latiusculâ, subrhomboidali, dentibus internis labii externi paucis, parvulis.

Shell oblong-ovate, whitish or yellowish, spire pyramidal, volutions 6, rather convex, speckled with chesnut in front, the 5 posterior volutions longitudinally ribbed, the anterior volution ribbed, but the dorsal ribs are almost obsolete anteriorly, aperture rather broad, sub-rhomboidal, teeth within the outer lip few and small.

There is a variety with nearly obsolete ribs. Locality unknown: in Mr. Bean's collection, and in my own.

51. Col. cribraria : Buccm. cribrarium, *Lam.* (pl. xxxviii. f. 112, 113.)

Col. testâ oblongo-pyramidali, lævigatâ, fuscâ, maculis, guttulisque albidis notatâ; spirâ acuminatâ, plerumque decollatâ; anfractibus 7—8, ultimo spiraliter striato ad basin; aperturâ albicante, dentibus internis peritrematis superioribus majusculis.

Shell oblong, pyramidal, smooth, fuscous, speckled, and spotted with whitish; spire acuminated, generally decollated, volutions 7—8, the last spirally striated at the base; aperture whitish, upper teeth of the inside of the outer lip larger than the rest.

Very common at Panama, under stones, H. Cuming. It has long been well known, but we have described it by the name of Col. guttata in Zool. Proc, ii. p. 118.

52. Col. dichroa, *nob.* (pl. xl, f. 168, 169.)

Col. testâ oblongo-sub-pyramidali, lævigatâ, albâ, casta-



neo sphacelatâ, apice obtuso, anfractibus quinque, aperturâ latâ.

Shell oblong, somewhat pyramidal, smooth, white with chesnut patches, apex obtuse; volutions 5, aperture broad.

St. Vincents, Rev. L. Guilding, in my own collection.

53. *Col. rugosa* Sow. (pl. xxxviii. f. 114, 115.) Z. P. ii. p. 115.

Col. testâ oblongâ, medio gibbosulâ; epidermide fuscâ, spiræ apice plerumque eroso; anfractibus 7, longitudinaliter costato-rugosis; ultimo infâ spiraliter costato, supernè longitudinaliter costato, costis omnibus supernè unituberculatis; aperturâ sub-apertâ.

Shell oblong, rather gibbous in the middle; with a fuscous epidermis, apex of the spire generally eroded; volutions 7, longitudinally ribbed or wrinkled, the last transversely ribbed in front and longitudinally ribbed posteriorly; all the ribs posteriorly tuberculated; aperture rather wide.

Found under stones at Panama and Xipixapi, H. Cuming.

54. *Col. varia* Sow. (pl. xxxix. f. 116, 117.) Z. P. ii. p. 116.

Col. testâ oblongâ, decussato-costatâ, apicè acuminato; anfractibus 8—9 fuscis, albido variegatis, longitudinaliter costatis, interstitiis costarum sulcatis; aperturâ sub-ovali; labii externi extûs incrassati margine supernè emarginato.

Shell oblong, cross-ribbed, apex acuminate, volutions 8—9, fuscous varied with whitish, longitudinally ribbed, interstices of the ribs grooved; aperture nearly oval; outer lip thickened externally; its edge posteriorly emarginated.

The ribs cease a little below the middle of the last volution.

Found under stones at Panama, H. Cuming.

55. *Col. scalarina* Sow. (pl. xxxix. f. 118.) Z. P. ii. p. 116.

Col. testâ ovatâ, longitudinaliter costatâ, spirâ pyramidali, anfractibus 6—7, supernè contabulatis, longitudinaliter costatis, interstitiis costarum decussatis, costis ad basin continuis; aperturâ coarctatâ, supernè emarginatâ; peritremate intûs denticulato; denticulis superioribus majoribus.

Shell ovate, longitudinally ribbed, spire pyramidal, volutions 6—7, flattened posteriorly, longitudinally ribbed, interstices of the ribs crossed; ribs continued on the base; aperture contracted, posteriorly emarginated; peritreme denticulated within, posterior teeth the larger.

Found under stones at Panama and Chiriqui, H. Cuming.

56. *Col. lactea*, (pl. xxxix. f. 119, 120.) *Bucc. lacteum* Kiener.

*Col. testâ ovato-oblongâ, nitidâ, pallescente, spirâ breviusculâ, acuminatâ, anfractibus 6—7, convexiusculis, lævigatis, ultimo magno; labio externo extûs incrassato, aperturâ latiusculâ, canali brevi, paululum levato.*

Shell oblong-ovate, shining, whitish, spire rather short, acuminate, volutions 6—7, somewhat convex, smooth; the last large, outer lip thickened; aperture rather broad, canal short, slightly raised.

57. *Col. pulchella*, *nob.* (pl. xxxix, f. 121, 122.) *Buccm. pulchellum*, *Kiener.*

*Col. testâ oblongo-pyramidali, albicante, fulvo marmoratâ, spirâ acuminatâ, anfractibus 7, convexiusculis, longitudinaliter costellatis, decussatim striatis; aperturâ latiusculâ, dentibus internis labii externi obsoletis.*

Shell oblong, pyramidal, whitish marbled with fulvous, spire acuminate, volutions 7, rather convex, longitudinally ribbed, decussately striated; aperture rather broad, teeth within the outer lip obsolete.

This is the *Buccm Triticum* of Solanders manuscripts; he gives *Caffraria* as its locality.

58. *Col. dermestoides*. (pl. xxxix, f. 123.) *Buccm. dermestoides*, *Kiener.*

*Col. testâ oblongo-pyramidali, lævi, nitidâ, fulvâ, fasciis maculisque albicantibus ornatâ; spirâ acuminatâ, anfractibus 6, sub-planulatis; aperturâ latiusculâ.*

Shell oblong, pyramidal, smooth, shining, fulvous, with whitish bands and spots, spire acuminate, volutions 6, flattish; aperture rather broad.

West Indies, Mr. Cuming's collection.

59. *Col. guttata*, *nob.* (pl. xxxix. f. 124.)

*Col. testâ oblongâ, lævi, castaneâ, albo-guttatâ, apice obtuso, violaceo, spirâ longiusculâ, anfractibus 5, sub-planulatis, ultimo magno, aperturâ magnâ, latâ, dentibus internis labii externi irregularibus; labio columellari dento unico postico.*

Shell oblong, smooth, chesnut-coloured, spotted with white, apex obtuse, violaceous; spire rather lengthened, volutions 5, rather flat, the last large; aperture large, wide, teeth

within the outer lip irregular; columellar lip with a single posterior tooth.

In Mr. Norris's and Mr. Stainforth's collections.

60. *Col. jaspidea*, *nob.* (pl. xxxix, f. 125.)

*Col.* testâ oblongâ, pyramidali, lævigatâ, albicante, fulvo-marmoratâ, apice acuminato, roseo, anfractibus 7, costellatis, tenuissimè decussatim striatis, costellis ultimi anfractûs anticè obsoletis, aperturâ latiusculâ, labio externo extûs incrassato, intûs denticulis nonnullis munito, dente unico anticè prope canalem admoto; labio columellari anticè tuberculum oblongum instructo.

Shell oblong, pyramidal, smooth, whitish, marbled with fulvous, apex acuminate, rosy; volutions 7, with small longitudinal ribs, very finely decussately striated, ribs of the last volution obsolete anteriorly; aperture rather wide, outer lip thickened externally, with a few small teeth within, and with a single tooth placed near the canal; columellar lip furnished with an oblong tubercle in front.

Found under stones at low water, on the Island of Ticao, Mr. Cuming.

61. *Col. achatina*. *nob.* (pl. xxxix, f. 126.)

*Col.* testâ oblongo-turritâ, lævi, pallidâ, brunneo-marmoratâ; apice decollato; anfractibus 6, convexiusculis, ultimo majori, anticè sulcato, sulcis paucis, inconspicuis; aperturâ brevi, latiusculâ, intûs violascente, labio externo anticè effuso.

Shell oblong-turreted, smooth, pale, marbled with brown, apex decollated; volutions 6, rather convex, the last large, grooved anteriorly, with few and inconspicuous grooves; aperture short, rather wide, violaceous within; outer lip effuse in front.

From Swan River, Mr. Cuming's collection.

62. *Col. impolita*. *nobis.* (pl. xxxix, f. 127.)

*Col.* testâ oblongâ sub-turritâ, lævi, obscurâ, fulvescente, fasciâ spirali unicâ albidâ; anfractibus 7, sub-planulatis; aperturâ breviusculâ, sinuosâ, denticulis internis labii externi paucis, prominentibus, labio columellari anticè paululùm levato.

Shell oblong, sub-turreted, smooth, dull, fulvous, with a single whitish spiral band; volutions 7, flattish; aperture

rather short, sinuous; internal teeth of the outer lip few and prominent: columellar lip slightly raised in front.

Mr. Cuming's collection.

63. *Col. buccinoides*. *Sow.* (pl. xxxix. f. 128.) *Z. P.* Part ii. 1832, p. 114.

*Col. testâ oblongâ, lævi, piceo-nigrâ, propè suturas pallidè maculatâ; spirâ acuminatâ; anfractibus 8, ultimo anticè spiraliter striato; labio externo extûs sub-incrassato, intûs obsoletè denticulato, margine superiori sub-emarginatâ; canali brevissimo.*

Shell oblong, smooth, pitch black with pale spots near the sutures; spire acuminated; volutions 8, the last spirally striated anteriorly; outer lip rather thickened externally, obsoletely toothed within, its upper margin slightly notched, canal very short. Found under stones at low water at Ancon, Peru.

*Col. buccinoides* of Lesson, published in 1842, is quite distinct from this.

64. *Col. unicolor*. *Sow. Z. P. ii.* 119. (pl. xxxix. f. 129.)

*Col. testâ ovatâ, medio ventricosâ, castaneâ; anfractibus 5, lævibus; suturâ profundiusculâ; aperturâ latiusculâ, ad basin sub-effusâ; canali brevissimo; labio externo extûs incrassato, intûs denticulis obsoletiusculis nonnullis.*

Shell ovate, ventricose in the middle, chestnut colour; volutions 5, smooth, suture rather deep; aperture rather broad, sub-effuse anteriorly; canal very short; outer lip thickened externally, with a few obsolete teeth within.

Found at the Gallapagos Islands, H. Cuming.

65. *Col. unifasciata*. *Sow.* (pl. xxxix. f. 130.) *Z. P.* Part ii. p. 114. *C. unizonalis*, Gray in Beechey.

*Col. testâ oblongo-pyramidali, lævi, castaneo-nigricante; anfractibus 6, medio spiraliter albido-unifasciatis; aperturâ breviusculâ, labio externo intûs denticulis nonnullis instructo.*

Shell oblong, pyramidal, smooth, chestnut black, volutions 6, with a whitish spiral band in the middle; aperture rather short, outer lip with a few small teeth within.

Found under stones at low water, at Valparaiso, H. Cuming.

66. *Col. rugulosa. nobis.* (pl. xxxix. f. 131.)

*Col. testâ obovatâ, rugulosâ, crassâ, violaceo-nigricante, fas-*



ciâ anticâ maculisque parvis albidis ornatâ; anfractibus 5, longitudinaliter costatis, tenuitèr decussatim striatis, striis anticis fortioribus; aperturâ latiusculâ, dentibus internis labii externi paucis, majusculis.

Shell obovate, rugulose, thick, of a violaceous black, with an anterior band and very small dots of a whitish colour; volutions 5, longitudinally ribbed, delicately decussately striated, anterior cross-striæ stronger than the rest; aperture rather broad, internal teeth of the outer lip few, rather large.

Gallapagos Islands, H. Cuming.

67. *Col. atramentaria. nob.* (pl. xl. f. 174.)

*Col. testâ ovato-acuminatâ, crassâ, medio vetricosâ, transversim striatâ, nigrâ, anfractibus 5---6, tenuitèr longitudinaliter costatis; aperturâ latâ, labio externo incrassato, internè denticulis sub-inconspicuis.*

Shell ovate, acuminate, thick, ventricose in the middle transversely striated, black; volutions 5---6, with fine longitudinal ribs; aperture broad, outer lip thickened, with rather inconspicuous small teeth within.

Chatham Island, Gallapagos: G. B. Sowerby's collection.

68. *Col. Ticaonis nobis.* (pl. xxxix. f. 132.)

*Col. testâ oblongâ utrâque acuminatâ, medio turgido; pallescente, castaneo-sphacelatâ; anfractibus 6, transversim striatis, suturis levatiusculis; aperturâ oblongâ, labio externo extûs incrassato, margine tenui, denticulis internis paucis, parvulis.*

Shell oblong, acuminate at either extremity, turgid in the middle, pale, splashed with chesnut colour; volutions 6, transversely striated; margin of the suture rather elevated; aperture oblong; outer lip thickened externally; its edge thin, with a few small denticles within.

Found at a depth of 7 fathoms in sandy mud, at the Island of Ticao. H. Cuming.

69. *Col. decussata. Nobis.* (pl. xxxix. f. 133.)

*Col. testâ oblongâ, crassâ, albâ, fusco-marmoratâ; anfractibus 5, turgidiusculis, decussatim costatis, aperturâ oblongâ, subsinuosâ, labio externo albo, crasso, posticè extûs obtusè angulato, margine externo crenato.*

Shell oblong, thick, white, marbled with fuscous; volutions 5, slightly turgid, with cross-ribs; aperture oblong, rather sinuous; outer lip white, thick, posteriorly obtusely angular externally; inner edge crenated.

Australia, G. Humphrey.

70. *Col. coronata* Sow. Z. P. ii. 114. (pl. xxxix. f. 134.)

Col. testâ oblongo-acuminatâ, albâ, brunneo-variegatâ; anfractibus 7—8, lævibus, ultimis tribus serie unicâ tuberculorum mucronatorum coronatis; labio externo intùs denticulato.

Shell oblong, acuminate, white varied with brown, volutions 7—8, smooth, the last three crowned with a single row of mucronated tubercles; outer lip toothed within.

This species varies much in the arrangement of its colours.

Found under stones in the Bay of Panama, H. Cuming.

71. *Col. maculosa* Sow. Z. P. ii. p. 116. (pl. xxxix. f. 135.)

Col. testâ oblongo-subulatâ, albidâ, irregulariter fusco-maculatâ; spirâ acuminato-pyramidali; anfractibus 9—10, primis 7—8 lævigatis, cæteris tuberculorum serie unicâ coronatis; ultimo serie alterâ adjectâ; aperturâ brevi, canali sub-recurvo.

Shell oblong, subulate, whitish, irregularly spotted with fuscous; spire acuminate, pyramidal, volutions 9—10, the first 7 or 8 smooth, the rest crowned with a single row of tubercles; the last with an additional row; aperture short, canal sub-recurved.

Dredged in sandy-mud at Guacomayo, H. Cuming.

72. *Col. angularis* Sow. Z. P. ii. 118. (pl. xxxix. f. 136.)

Col. testâ oblongo-pyramidali, pallidâ, fusco-variâ; spirâ subulatâ; anfractibus 10, longitudinaliter costatis, ultimi medio subangulato, basi reflexo; aperturâ sub-quadratâ, canali longiusculo, lato, peritremate extùs incrassato.

Shell of an oblong pyramidal form and of a pale colour, varied with fuscous; spire subulate; volutions ten, longitudinally ribbed, with the centre of the last somewhat angular, reflected at the base; aperture squarish; canal rather long, broad; peritreme thickened externally.

Panama.

73. *Col. turrita*, Sow., Z. P. ii. p. 115. (pl. xxxix. f. 137, 138.)

Col. testâ elongato-pyramidatâ, spirâ subulatâ; anfractibus 10, albidis, fusco-reticulatis, et propè suturam articulatis; aperturâ oblongâ, supernè acuminatâ, sub-canaliferâ; labio externo incrassato; peritremate albo, sub-reflexo, intùs lævi; columellâ arcuatâ.

Shell elongate, pyramidal, spire subulate; volutions 10, whitish, reticulated with fuscous; and alternately whitish and fuscous next to the suture; aperture oblong, acuminate,

and with a slight canal posteriorly; outer lip thickened, peritreme white, somewhat reflected, smooth within; columella arched.

There is a variety of a pale colour. Bay of Montigo and St. Elena, Central America, H. Cuming.

74. *Col. elegans*, Sow., Z. P., Part ii. p. 114, (pl. xxxix. f. 139.)

*Col. testâ elongato-subulatâ, albâ fusco-variâ et reticulatâ, epidermide tenui fulvâ indutâ; anfractibus 11—12, primis lævibus, cæteris longitudinaliter costatis, ultimo infrâ spiraler sulcato; labio externo incrassato; peritremate sub-reflexo, supernè intûs emarginato, demùm dentibus nonnullis internis; labio interno lamellari; canali incrassato.*

Shell elongated subulate, whitish varied and reticulated with fuscous and covered with a thin fulvous epidermis; volutions 11—12, the first smooth, the rest longitudinally ribbed, the last transversely grooved anteriorly; outer lip thickened, peritreme slightly reflected, posteriorly emarginated within, then with a few internal teeth; inner lip lamellar; canal thickened.

Found in sandy mud at Guacomayo, in Central America, H. Cuming.

75. *Col. dorsata*, Sow. Z. P. ii. 120. (pl. xxxix. f. 140, 141.)

*Col. testâ oblongo-pyramidal, albâ, lineis irregularibus, flexuosis, confertis, castaneis obtectâ; anfractibus 8, lævibus, supernè turgidulis; ultimi lateribus inflatis dorso prominente; suturâ distinctâ; aperturâ angustâ, flexuosâ, albâ; peritremate extûs incrassato; labio columellari exarato.*

Shell oblong, pyramidal, white, covered with close set irregular, flexuous, chestnut lines; volutions 8, smooth, somewhat turgid posteriorly, with the sides of the last inflated, and prominent on the back; suture distinct; aperture narrow, flexuous, white, peritreme outwardly thickened; columellar lip eroded.

Distinguished from *Col. gibberula*, by its larger size, and by the middle of the columellar lip being worn away. Island of Muerte, Bay of Guyaquil, H. Cuming.

76. *Col. gibberula* Sow. Z. P. ii, 115. (pl. xxxix. f. 142, 143.)

*Col. testâ ovato-pyramidal; spirâ subulatâ; anfractibus 8—9, pallidis, brunneo-nubeculatis; ultimi dorso supernè gibberulo, ad utrumque latus varicoso; aperturâ breviusculâ; peritremate incrassato, expanso, intus denticulis nonnullis;*

labio interno supernè calloso, medio arcuato; canali brevi, reflexo.

Shell ovate, pyramidal, spire subulate; volutions 8—9, pale clouded with brown; back of the last posteriorly gibbous, varicose on each side; aperture rather short; peristreme thickened, expanded, with a few small teeth within; inner lip callous posteriorly, arched in the middle; canal short reflected.

Bay of Caraccas and Puerto Portrero; H. Cuming.

77. Col. bicanalifera, *Sow. Z. P.*, part ii., p. 113. (pl. xxxix. f. 144.)

Col. testâ ovato-pyramidali, apice acuto, basi spiraliter sulcato; anfractibus 7, superioribus longitudinaliter rugosis, pallescentibus, fusco-variis, ultimo pallido, fusco strigato, strigis propè suturas saturatoribus; aperturâ oblongâ, in canalem supernè decurrente, labio externo incrassato, reflexo, sub-flexuoso, supernè acuminato.

Shell ovate, pyramidal, apex sharp, base spirally grooved, volutions 7, upper ones longitudinally rugose, pale varied with fuscous; the last pale with fuscous streaks, those near the sutures dark in colour; aperture oblong, running into a canal posteriorly; outer lip thickened, reflected, slightly flexuous, acuminated posteriorly.

Dredged in sandy mud at ten fathoms depth: Gallapagos.

78. Col. blanda. *Sow.* (pl. xxxix. f. 145, 146.)

Col. testâ ovato-pyramidali, pallidâ, apice acuto, anfractibus 8, lævibus, longitudinaliter undulatim fusco-lineatis, lineis prope suturam dorsalem ultimi anfractus fortioribus; aperturâ latâ, posticè acuminatâ, labio externo tenuiusculo, extûs turgido, intûs denticulis parvis instructo, canali latiusculo.

Shell ovate-pyramidal, pale coloured; apex acute; volutions 8, smooth, with longitudinal undulated fuscous lines, those near the dorsal suture of the last volution darkest in colour; aperture broad, posteriorly acuminated; outer lip rather thin; turgid externally, with small denticles within; canal rather wide.

Africa, on the Shore, Solander.

79. Col. costellata. *Sow. Z. P.* ii. p. 111. (pl. xxxix. 147.)

Col. testâ oblongo-pyramidali, albidâ, castaneo-nigricante maculatâ; spirâ acuminatâ, anfractibus 8—9, longitudinaliter costellatis, ultimo ad basin spiraliter striato, costellis discontinuis.



Shell oblong, pyramidal, whitish, spotted with chestnut black; spire acuminate; volutions 8—9, longitudinally costellated; the last spirally striated anteriorly; where the ribs are discontinued.

The ribs are rather close-set, narrow and slightly curved; the last six or seven not continuing more than half way from back to front of the volution; the remaining ribs continue farther down.

Panama, a single specimen in H. Cuming's collection.

80. *Col. fulva*. *Sow. Z. P. ii. p. 115.* (pl. xxxix. f. 148.)

*Col. testâ ovato-subulatâ, fulvâ; epidermide minutissimè reticulatâ indutâ; anfractibus 10, longitudinaliter costatis, ultimo anticè spiraliter striato, supernè longitudinaliter costato; aperturæ labio externo dentibusque internis albis.*

Shell ovate-subulate, fulvous; with a very minutely reticulated epidermis; volutions 10, longitudinally ribbed, the last spirally striated anteriorly and posteriorly longitudinally ribbed; outer lip and internal teeth of the aperture white.

Found under stones at Panama, H. Cuming.

80. *Col. lyrata*. *Sow. Z. P. Part ii. p. 114.* (pl. xxxix. f. 149.)

*Col. testâ oblongâ, acuminatâ, albidâ, epidermide fuscâ indutâ; anfractibus 10, longitudinaliter costatis, costis infrâ nigris; ultimo anfractu infrâ spiraliter striato; supernè longitudinaliter costato, costis nigro-articulatis; aperturâ oblongâ, breviusculâ, medio coarctatâ, labio externo intus denticulato.*

Shell oblong, acuminate, whitish, covered with a fuscous epidermis, volutions 10, longitudinally ribbed, ribs anteriorly black; last volution spirally striated in front; posteriorly longitudinally ribbed, ribs alternately whitish and black, aperture oblong, shortish, contracted in the middle; outer lip toothed within.

Found under stones in the Bay of Panama, and at Chiriqui, H. Cuming.

82. *Col. fluctuata*. *Sow. Z. P. ii. p. 115.* (pl. xxxix. f. 150.)

*Col. testâ oblongâ, albâ, nigro vel castaneo-maculatâ et fluctuatâ; epidermide fuscâ; spiræ apice plerumque eroso; anfractibus 7, longitudinaliter costatis, ultimi costis abbreviatis; aperturâ medio coarctatâ; labio externo supernè emarginato, interno infrâ denticulato.*

Shell oblong, whitish, spotted and undulated with chesnut

or black; epidermis fuscous; apex of the spire generally eroded, volutions 7, longitudinally ribbed, the ribs of the last volution abbreviated; aperture contracted in the middle; outer lip emarginated posteriorly; inner lip denticulated anteriorly.

Found under stones in the Gulf of Nocoioy, H. Cuming.

83. *Col. nivea. nobis.* (pl. xxxix. f. 151.)

*Col. testâ ovato-pyramidali, crassiusculâ, lævi, niveâ, apice acuminato, anfractibus 8, primis 6 lævigatis, penultimo longitudinaliter costellato, ultimo costato, ad partem dorsalem anticam lævi; aperturâ sub-angustâ, sub-sinuosâ, labio externo crasso, intus sub-denticulato, labio commellari anticè levato.*

Shell ovate, pyramidal, thickish, smooth, snow-white, apex acuminate; volutions 8, the first 6 smooth, the last but one longitudinally ribbed, the last with larger ribs, smooth on the anterior part of the back; aperture rather narrow, slightly sinuous, outer lip thick, denticulated within; inner lip elevated anteriorly.

In Mr. Cuming's collection.

84. *Col. recurva. Sow. Z. P. ii. p. 115. (pl. xl. f. 152.)*

*Col. testâ oblongâ, turritâ, fulvâ, spirâ acuminato-pyramidali; anfractibus 10 — 11; primis 6 longitudinaliter costatis, cæteris serie unicâ tuberculorum instructis; ultimi dorso sub-gibbo, parte inferiori transversim striatâ; aperturâ elongatâ canali longiusculâ recurvâ; labio externo reflexo, incrassato.*

Shell oblong, turreted, fulvous, spire acuminate, pyramidal, volutions 10—11; the six first longitudinally ribbed, the rest furnished with a single series of tubercles, the back of the last rather gibbous, with the anterior part transversely striated; aperture elongated, canal rather long and recurved; outer lip reflected, thickened.

Found among Coral sand in the Isle of Plata, H. Cuming.

85. *Col. lanceolata, Sow. Zool. Pr. ii. p. 116. (pl. xl. f. 153, 154, 155.)*

*Col. testâ oblongâ, turritâ, albidâ, fulvo-variâ; spirâ acuminatâ, pyramidali; anfractibus 10—12, primis 6—7, lævigatis, cæteris serie unicâ tuberculorum instructis; ultimi dorso subgibbo, anticè transversim striato; aperturâ elongatâ canali breviusculo, sub-recurvo; labio externo incrassato, variciformi.*

Shell oblong, turreted, whitish, varied with fuscous, spire acuminate, pyramidal; volutions 10—12; the first 6 or 7 smooth, the rest furnished with a single row of tubercles; the back of the last volution somewhat gibbous, anteriorly transversely striated; aperture elongated, canal rather short, slightly recurved; outer lip thickened, variciform.

We have represented three varieties of this fine species. From the Gallapagos Islands, H. Cuming.

86. *Col. pulcherrima*, *Sow. Z. P. ii. p. 113. (pl. xl. f. 156, 157.)*

*Col. testâ ovatâ, spirâ subulatâ; anfractibus 9, primo minimo, albo; 2<sup>o</sup>, 3<sup>o</sup>, 4<sup>to</sup> et 5<sup>to</sup> nigro-rufescentibus, politis; 6<sup>to</sup>, 7<sup>mo</sup>, et 8<sup>vo</sup>, concoloribus, spiraliter sulcatis; ultimo ventricosus, spiraliter sulcatus, albido, sulcis brunneis; labio externo incrassato; peritremate polito, intus supernè emarginato, infra denticulato; labio interno tenui, polito; canali recurvo.*

Shell ovate, with a subulate spire; volutions 9, the first small white, the 2<sup>d</sup>, 3<sup>d</sup>, 4<sup>th</sup>, and 5<sup>th</sup>, blackish red, shining; the 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, of the same colour, spirally grooved; the last ventricose, spirally grooved, whitish, with brown grooves; outer lip thickened, peritreme shining, emarginated posteriorly within, and denticulated anteriorly; inner lip thin, shining; canal recurved.

A single specimen was found in the Gulf of Dulce, H. Cuming.

87. *Col. sub-ulata*, *nob. (pl. xl. f. 158, 159.)*

*C. testâ turrato-pyramidali, lævigatâ, albidâ, epidermidetenui, corneâ, pallescente indutâ, spirâ sub-ulatâ, anfractibus decem, convexiusculis, primis septem lævibus, tribus ultimis posticè transversim striatis, ultimo striato, posticè tumido; aperturâ sinuosâ, albâ, labio externo extus incrassato, intus medianè incrassato, denticulato; labio interno incrassato, levato; canali brevi reflexo.*

Shell pyramidal, turreted, smooth, whitish, covered with a thin horny, pale coloured epidermis, spire subulate, volutions 10, rather convex, the first 7 smooth, the three last posteriorly transversely striated, the last striated and tumid posteriorly; aperture sinuous, white, outer lip thickened externally; thickened and denticulated within; inner lip thickened and elevated; canal short, reflected.

In Mr. Norris's collection, locality unknown.

88. *Col. Puella, nobis.* (pl. xl. f. 160, 161.)

*Col. testâ ovato-pyramidali, spirâ acuminatâ, acutâ, pallidè castaneâ vel brunneâ, variegatâ, anfractibus 9, longitudinaliter costellatis, lævibus, ultimo anticè transversim striato; suturâ crenulatâ, albâ; canali distincto, extûs transversim sulcato; aperturâ oblongâ, sub-rhomboideâ, labio columellari uniplicato.*

Shell ovate, pyramidal, spire acuminate, acute, varied with pale chesnut or brown; volutions 9, smooth with small longitudinal ribs, the last transversely striated in front; suture crenulated, white; canal distinct, transversely grooved externally; aperture rhomboidal; columellar lip with one fold.

From Burias, H. Cuming; a variety nearly free from the longitudinal ribs, occurs at Catbalonga.

89. *Col. pygmæa. Sow. Z. P. ii. 19.* (pl. xl. f. 163.)

*Col. testâ ovato-oblongâ, pallescente; spirâ acuminatâ; anfractibus 6, superioribus quinque longitudinaliter costatis, fasciâ interruptâ nigrâ; ultimo supernè longitudinaliter costato, infrâ spiraliter sulcato, fasciis duabus interruptis, nigris; aperturâ latiusculâ; labii externi margine supernè emarginatâ.*

Shell oblong-ovate, pale coloured, spire acuminate; volutions 6, the 5 first longitudinally ribbed, with an interrupted black band; the last longitudinally ribbed posteriorly, and spirally grooved anteriorly, with two black interrupted bands; aperture rather broad: posterior margin of the outer lip notched.

Found on dead shells at St. Elena: H. Cuming.

90. *Col. lunata. nob.* (pl. xl. f. 164.) *Nassa Say; Buccinum Gould.*

*Col. testâ ovatâ, lævi, pallidè rufo brunnescente, seriebus duabus pallescentibus maculorum semilunatorum ornatâ, apice acuminato, aperturâ ovali, labio externo fusco intûs denticulato.*

Shell ovate, smooth, pale reddish brown, with two rows of crescent shaped whitish spots; apex acuminate, spire conic; a single impressed line just in front of the suture; aperture oval with a small notch posteriorly, outer lip fuscous, denticulated within.

Massachusetts, Dr. Gould.

91. *Col. sulcosa. Sow. Z. P. ii. 118.* (pl. xl. f. 165.)

*Col. testâ ovato-oblongâ, fulvâ, nigricante vel rufo-nigricante*



lineatâ; spirâ acuminatâ, anfractibus 7, longitudinaliter costatis, decussatim spiraliter sulcatis; caudâ reflexâ; aperturâ supernè latiori, infrâ canali distinctâ; labio externo extûs incrassato, intûs denticulis 4 centralibus, internorugis basalibus nonnullis.

Shell oblong ovate, fulvous with black or reddish black lines; spire acuminated; volutions 7, longitudinally ribbed and cross-grooved; canal reflected; aperture broader posteriorly, with a distinct canal anteriorly; outer lip thickened externally with 4 central teeth within: inner lip wrinkled in front.

From Annaa and Lord Hood's Islands, H. Cuming.

92. *Col. suffusa nob.* (pl. xl. f. 166, 167.)

Col. testâ oblongâ, crassiusculâ, albicante, maculis litturisque fuscis ornatâ, spirâ acuminatâ, conoidali, anfractibus 6—7, longitudinaliter costatis, interstitiis costarum tenuiter transversim striatis: aperturâ latiusculâ.

Shell oblong, thickish, whitish, with fuscous spots and specks; spire acuminated, conoidal; volutions 6—7, longitudinally ribbed, interstices of the ribs slightly transversely striated; aperture rather wide.

Pacific Ocean, Cuming.

83. *Col. parva nob.* (pl. xl. f. 170.)

Col. testâ oblongâ, pallidâ, fasciâ spirali castaneâ unicâ ornatâ; apice acuminato, anfractibus 6, longitudinaliter costatis, decussatim striatis, ultimo anticè propè labium externum variciformatum lævigato, supra canalem transversim striato: aperturâ breviusculâ, subsinuosâ, labio columellari levato.

Shell oblong, pale, with a single spiral chesnut coloured band; apex acuminated, volutions 6, longitudinally ribbed, cross-striated, the last smooth anteriorly near the outer variciform lip; aperture rather short, somewhat sinuous; columellar lip raised.

Found under stones at Monte Christi, West Columbia, H. Cuming.

94. *Col. catenata nob.* (pl. xl. f. 171.)

Col. testâ oblongâ, crassâ, pallidâ, undulatim castaneo-marmoratâ, apice acuminato, obtusiusculo, anfractibus 6, longitudinaliter costatis, interstitiis lævibus, ultimo anticè transversim striato; aperturâ latiusculâ, denticulis parvis 4 labii columellari obtusis.

Shell oblong, thick, pale, with undulated chestnut coloured markings; apex acuminated, rather obtuse, volutions 6,

longitudinally ribbed; the interstices smooth; the last volution transversely striated in front, aperture rather wide, with four small obtuse denticles on the columellar lip.

Locality unknown: Mr. Cuming's collection.

95. *Col. nigricans nob.* (pl. xl. f. 172.)

Col. testâ oblongâ, nigricante, apice acuminato, anfractibus 6, longitudinaliter costatis, interstitiis costarum tenuiter transversim striatis; suturâ distinctâ, crenulatâ, albicante; margine labii externi pallido.

Shell oblong, blackish, apex acuminate, volutions six, longitudinally ribbed, interstices of the ribs slightly transversely striated; suture distinct, crenulated, whitish, edge of the outer lip pale.

Gallapagos Islands. Mr. Cuming's collection.

96. *Col. Dormitor nob.* (pl. xl. f. 173.)

Col. testâ ovato-conoideâ, pallescente, spirâ conicâ, breviusculâ, anfractibus 6, transversim sulcatis, aperturâ elongatâ, margine interno labii externi crenulato.

Shell ovate-conoidal, of a pale colour, spire conical, rather short; volutions six, transversely grooved; aperture elongated; inner edge of the outer lip crenulated.

St. Vincent's, Rev. L. Guilding, in Mr. Gray's collection.

97. *Col. Guildingii nob.* (pl. xl. f. 175, 176.)

Col. testâ oblongo-pyramidali, pallescente, brunneo-variegatâ, apice acuminato sub-turrito, anfractibus 6; longitudinaliter costatis et transversim striatis; aperturâ longiusculâ, sinuosâ, canali subelongato, extus transversim sulcato.

Shell oblong, pyramidal, pale, varied with brown, apex acuminate, sub-turreted; volutions 6, longitudinally ribbed and transversely striated; aperture rather long, sinuous; canal somewhat lengthened, outwardly transversely striated.

Found at St. Vincent's, by the late Rev. Lansdowne Guilding.—In the British Museum.

98. *Col. Broderipii nob.* (pl. xl. f. 178, 179.)

Col. testâ oblongo-turritâ, lævi, castaneâ, variè albo-maculatâ et guttatâ; anfractibus 5, subventricosis; aperturâ oblongâ, latiusculâ; labio externo intus denticulis 2—3 obsoletis instructo; anfractu ultimo anticè transversim striato.

Shell oblong, turreted, smooth, chestnut colour, variously spotted and speckled with white; volutions 5, rather ventricose; aperture oblong, rather wide; outer lip with 2—3

obsolete denticles within; last volution transversely striated in front.

Alboran Island, W. J. Broderip, Esq., in the British Museum.

99. Col. Kraussii *nob.* (pl. xl. f. 180, 181.)

Col. testâ ovato-oblongâ, lævi, albicante, lineis castaneis undulatis signatâ; anfractibus 5—6, subventricosus, longitudinaliter costellatus, costellis distantibus, interstitiis lævibus; aperturâ latâ; canali brevissimo.

Shell oblong ovate, smooth, whitish, marked with undulated chestnut coloured lines; volutions 5—6 rather ventricose, with small longitudinal ribs, which are distant, and the interstices smooth; aperture broad; canal very short.

Found at Natal by Dr. Krauss: in the British Museum.

100. Col. monilifera. *nobis.* (pl. xl. f. 177.)

Col. testâ turritâ, albâ, maculis irregularibus brunneis pictâ, spirâ acuminatâ, anfractibus 7, longitudinaliter costatis et transversim sulcatis, series tres posticas et seriem unicam costellarum granuliferarum anticam instructis; aperturâ brevi, latiusculâ.

Shell turreted, white, irregularly speckled with brown; spire acuminate, volutions 7, longitudinally ribbed, and transversely sulcated, with three posterior and one anterior rows of granulate ribs, aperture short, rather broad.

From the West Indies, the late G. Humphrey.

101. Col. pusilla, *nob.* (pl. xl. f. 182, 183.)

Col. testâ ovatâ, lævi, albicante, lineis pallide brunneis pictâ; spirâ sub-acuminatâ; anfractibus 5—6, sub-ventricosus; aperturâ latiusculâ; labio externo crassiusculo, intus obsolete denticulato; labio interno intus tuberculo obtuso instructo; canali brevi.

Shell ovate, smooth, whitish, with pale brown lines; spire slightly acuminate; volutions 5—6, somewhat ventricose; aperture rather broad; outer lip thickish, obsoletely denticulated within; inner lip with an obtuse tubercle within; canal short.

St. Vincent's, the late Rev. L. Guilding.

102. Col. atomella, *Ducl.* (pl. xl. f. 184, 185.)

Col. testâ oblongâ, albicante, nonnunquam pallidè castaneo unifasciatâ, spirâ acuminatâ, anfractibus 6, longitudinaliter

costatis; suturâ crenatâ; ultimo anfractu anticè lævi; suprâ canalem transversim sulcato; aperturâ angustâ.

Shell oblong, whitish, sometimes with a pale chesnut band; spire acuminated, volutions 6, longitudinally ribbed: suture crenated, last volution smooth in front, transversely grooved on the back of the canal; aperture narrow.

West Indies, Rev. L. Guilding.

# EXPLANATION OF PLATES XXXVI, XXXVII, XXXVIII, XXXIX, XL. C O L U M B E L L A.

*(The figure at the end of each name, refers to the species in the text.)*

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|-----------------------------------|----------------------------------|
| FIG. 1, 2, Col. Strombiformis, 1. | FIG. 51, 52. Col. pæcila, 20.    |
| 3, 4. — major, 2.                 | 53, 54. — bidentata, 21.         |
| 5. — hæmastoma, 3.                | 55, 56, 57. — flavida, 22.       |
| 6. — major var, 2.                | 58 to 61. — semipunctata, 23.    |
| 7. — castanea, 4.                 | 62. — Tringa, 24.                |
| 8, 9. — labiosa, 5.               | 63, 64. — obtusa, 25.            |
| 10. — Harpiformis, 6.             | 65, 66. — splendidula, 26.       |
| 11. — castanea, 4.                | 67 to 69. — ovulata, 27.         |
| 12. — Harpiformis, 6.             | 70, 71. — obscura, 28.           |
| 13, 14. — uncinata, 7.            | 72, 73. — marmorata, 30.         |
| 15, 16. — Duclosiana, 8.          | 74, 75, 76. — Philippinarum, 31. |
| 17, 18. — chlorostoma, 9.         | 77, 78. — coniformis, 32.        |
| 19. — rustica, 10.                | 79, 80. — aspersa, 33.           |
| 20. — festiva, 13.                | 81, 82. — albina, 34.            |
| 21. — fuscata, 11.                | 83, 84, 85. — Ligula, 35.        |
| 22. — rustica var, 10.            | 86, 87. — Fabula, 36.            |
| 23. — reticulata, 12.             | 88, 89. — Tyleri, 37.            |
| 24. — rustica var, 10.            | 90, 91, 92. — Pardalina, 38.     |
| 25. — fuscata, 11.                | 93. — vulpecula, 39.             |
| 26. — reticulata var, 12.         | 94, 95, 96. — fulgurans, 40.     |
| 27. — festiva, 13.                | 97. — flexuosa, 41.              |
| 28, 29, 30, } —                   | 98, 99. — Terpsichore, 42.       |
| 31, 32. } — mercatoria, 14.       | 100. — Boivinii, 43.             |
| 33, 34, 35. — rudis, 15.          | 101, 102. — corniculata, 44.     |
| 36, 37. — Paytensis, 16.          | 103, 104. — semiconvexa, 45.     |
| 38, 39, 40. — Turturina, 17.      | 105. — Zebra, 46.                |
| 41 to 46. — versicolor, 18.       | 106, 107. — fasciata, 47.        |
| 47 to 50. — varians, 19.          | 108, 109. — concinna, 48.        |



FIG. 110. *Col. avara*, 49.

- 111. — *Miser*, 50.
- 112, 113. — *cribraria*, 51.
- 114, 115. — *rugosa*, 53.
- 116, 117. — *varia*, 54.
- 118. — *scalarina*, 55.
- 119, 120. — *lactea*, 56.
- 121, 122. — *pulchella*, 57.
- 123. — *dermestoides*, 58.
- 124. — *punctata*, 59.
- 125. — *jaspidea*, 60.
- 126. — *achatina*, 61.
- 127. — *impolita*, 62.
- 128. — *buccinoides*, 63.
- 129. — *unicolor*, 64.
- 130. — *unifasciata*, 65.
- 131. — *rugulosa*, 66.
- 132. — *Ticaonis*, 68.
- 133. — *decussata*, 69.
- 134. — *coronata*, 70.
- 135. — *maculosa*, 71.
- 136. — *angularis*, 72.
- 137. — *turrita*, 73.
- 138. — *turrita*, var. 73.
- 139. — *elegans*, 74.
- 140, 141. — *dorsata*, 75.
- 142, 143. — *gibberula*, 76.
- 144. — *bicanalifera*, 77.

Fig. 145, 146. *Col. blanda*, 78.

- 147. — *costellata*, 79.
- 148. — *fulva*, 80.
- 149. — *lyrata*, 81.
- 150. — *fluctuata*, 82.
- 151. — *nivea*, 83.
- 152. — *recurva*, 84.
- 153 to 155. — *lanceolata*, 85.
- 156, 157. — *pulcherrima*, 86.
- 158, 159. — *subulata*, 87.
- 160. — *Nympha*, 88.
- 161. — *Nympha* var. 88.
- 162. — *nitidula*, 29.
- 163. — *pygmæa*, 89.
- 164. — *lunata* 90.
- 165. — *sulcosa*, 91.
- 166, 167. — *suffusa*, 92.
- 168, 169. — *dichroa*, 52.
- 170. — *parva*, 93.
- 171. — *catenata*, 94.
- 172. — *nigricans*, 95.
- 173. — *dormitor*, 96.
- 174. — *atramentaria*, 67.
- 175, 176. — *Guildingii*, 97.
- 177. — *monilifera*, 98.
- 178, 179. — *Broderipii*, 99.
- 180, 181. — *Kraussii*, 100.
- 182, 183. — *pusilla*, 101.
- 184, 185. — *atomella*, 102.

## MONOGRAPH OF THE GENUS

TEREBRA; *Bruguère*.

BY

RICHARD BRINSLEY HINDS, ESQ.

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Testa subulata, acuminata, subturrita. Anfractus numerosi, rariùs numerosissimi, rarissimè perpauci, planulati; ultimus brevis, contractus. Apertura ovalis, interdum subquadratus. Columella nuda vel callo induta; recta, obliqua, vel contorta. Canalis subnullus vel paulò productus; rectus vel subrecurvus. Operculum corneum, lamellosum, unguiforme.

Testa elongata, turrita, apice peracuta. Apertura longitudinalis. Spirà duplò vel ultrà brevior, basi posticè emarginata. Columellæ basis contorta vel obliqua. *Lamarck*.

Testa elongata, subulata, anfractibus numerosis, gradatim majoribus, aperturà brevi, oblongà, in canalem brevem, rectam desinente; columellà contortà, spirali: operculo corneo, non spirali. *Sowerby*, Genera.

Testa elongata, turrita, apice peracuta. Apertura longitudinalis; spira duplò vel ultrà brevior, basi posticè emarginata. Columellæ basis contorta vel obliqua. Operculum ovatum, corneum, lamellosum, imbricatum. *Kiener*.

The *animal* is remarkable for its small size compared with that of the shell, and also for the minuteness of its organs. That of *Terebra dimidiata*, is described by MM. Quoyet Gaimard;—head large. Tentacles distant, very small and short. Eyes scarcely visible, situate about the middle of the length of the tentacles. Foot elongated, somewhat cylindrical, grooved. Between the tentacles is a thick cylindrical trunk, capable of dilating itself, and forming a cavity. Stomach elongated, slightly dilated. Salivary glands surrounding the œsophagus, vermicular, united into a mass. Biliary organ and testacle occupy nearly the whole of the spire. Heart apparently very elongated. Follicles situate in the folds of the margin of the mantle, and secrete, more or less abundantly, a mucous fluid.

The branchial cavity is extensive, extended longitudinally, and has on its left side a long straight comb of fine and closely set lamellæ. The siphon is thick and short, and capable of being projected only a short distance. Animal of an uniform clear orange colour. Voyage de l'Astrolabe, p. 462-4. M. Kiener's remarks on the animal are so similiar to the foregoing, that they were most probably taken from it. The animal of *Terebra subulata* was also examined by Quoy and Gaimard, and was found very closely to resemble *T. dimidiata*, differing only in the relative size of some of the organs. The animal was of a deep yellow colour. Mr. Gray, in the Zoology of Beechey's Voyage, p. 125, thus speaks of the animal, the species not being indicated :—"the tentacles of this genus are exceedingly minute, and placed on the upper edge of the inflexed trunk, and they have no eyes. In one species from St. Christopher which I have examined, there was no appearance of any tentacles, nor eyes; in another, the tentacles are very small with eyes at their tip. The male organ is extremely long, filiform, as long as two whorls of the shell. The foot is small, folded across when contracted. The head is rounded. The mantle has a very long slender filiform breathing canal."

The number of species belonging to this group at the present time is rather considerable, and in these halcyon days of new species, the genus has kept in the current and received an accession of strength scarcely inferior to any other. A few species, and among these some of the largest and most richly adorned, were known to the earliest systematic writers, and were placed by them in a separate and distinct section of Buccinum. Subsequently Bruguières embodied them under the present generic head, but it was Lamarck who more particularly brought it into notice, in the illustration of the group by several well-known species. Previous to Bruguières Adanson, and subsequently Schumacher and Blainville have made mention of it, but only to originate errors and create confusion. The number of recent species given by Lamarck is twenty-four; M. Deshayes' list states the recent species to be forty-four, and the fossil sixteen in number; the monograph of M. Kiener contains only thirty-five recent species. These numbers have been chiefly augmented by a list of twenty-one species, published by Mr. Gray in the proceedings of the Zoological Society for 1834, which are of prior date to M. Kiener's labours, but are unnoticed by him; and by a further addition of fifty species, published by myself in the same proceedings of 1843. At this moment, the amount of recent

species is 109, including one or two of doubtful existence, and of fossil, 24; and of the former 8 are found both in a recent and fossil state.

The only *sectional division* of the genus that has been attempted, is that of Mr. Gray in the above proceedings. This division is three-fold; the two first of these depend on the presence of the peculiar girdling or division of the whorls, and which is very conspicuous in many species, but practically I fail to carry it out in detail. Some species also are so excessively variable in this character, that M. Kiener has described *Terebra castanea* as having girdled whorls, but has figured it without them. The latter writer has not attempted any grouping of the species in his monograph, and as he has done so in most cases, we may venture to infer that he did not see room for it here.

It cannot be denied that among the numerous species are several shells, which, taken by themselves, would furnish good grounds for sectional or even sub-generic divisions. And if we take *T. maculata* as the proper generic type, then *T. lanceata*, *T. armillata*, and *T. commaculata*, seem to offer strong points of difference, and good grounds for sectional heads. But, with every wish to establish some such divisions, I have found it impracticable so to group the species that there shall be little or no doubt which section they belong to; and, unless this object is attained, I do not see any use in a division; science would not be benefited merely by selecting the salient points and strong grounds of the exceptions, and leaving the crowd to follow as they may.

In *geographic distribution* the group is essentially tropical. Indeed the exceptions are very rare. One species occurs in the Mediterranean Sea, but it is an aberrant form. Another is met with on the shores of the United States, but I am not in possession of its northern range; perhaps a few species occur as extra-tropical on the shores of New Holland. It will thus be seen, that few genera of similar bulk are so excessively tropical. The species abound more particularly in the Asiatic and Pacific Seas, are usually found in situations of sands, sandy mud, or fine coral, often under a few feet of water, though sometimes at greater depths; and seem also to be most fruitful in individuals, since where they inhabit, they may generally be procured in great numbers. In their distribution about fifty-three inhabit the Asiatic and Pacific Seas, seventeen the American, and fifteen the African; of twenty-four the locality is unknown, and our information of the West Indian species is most barren. Our knowledge of the native country of



a large proportion of the published species was so very limited that it became an object with me to supply so important a desideratum from approved sources. And, if in this I have been to a great extent fortunate, it is attributable partly to the care which I find manifested in Mr. Cuming's manuscript catalogues of recording the native country with the circumstances of habitation, and partly to my own experience, since within the tropics I have chanced to encounter a large number of species. I have also, when practicable, stated every habitat; since several habitats inform us of the range, and we thus attain a step towards geographic diffusion; and as the authority for a habitat unquestionably increases its value, I have studiously attached the name of the collector; the only exception being in my own case, and in almost every instance where no authority is quoted, I am responsible.

A reversed species occurs among the fossils, *Terebra inversa*. Nyst.

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#### DESCRIPTIONS.

1. *T. MACULATA*. (pl. xlii. f. 33.) *Lamarck*, Hist. des Animaux sans Vert. v. vii. p. 283. *Buccinum maculatum*, *Linnaeus*, Syst. Nat. p. 1205, *Subula maculata*, *Schumacher*, Nouv. Syst. p. 233.

Testâ elongatè conico-subulatâ, ponderosâ, politâ, albidâ; anfractibus planulatis, versùs medium sulco divisis, maculis fuscis seriatim cinctis, ultimo luteo quadratim maculato; aperturâ subattenuatâ; columellâ contortâ.

Shell handsome, massive and heavy, subulate, the ground colour of a cream colour with two series of rich reddish-brown, irregular, longitudinal, aggregated strigæ or spots, of which the upper series is the larger; whorls smooth, flattened, divided by an impressed line, not always very visible in mature individuals, but apparent on the superior whorls; last whorl banded with pale chesnut; aperture an elongated oval; columella naked, somewhat twisted.

This is the typical species, and an eminently handsome shell. In the Pacific, the animal is eaten as food, and the shell, ground at an angle, was much in use as a chisel in the construction of the canoes.

Its habitat is extensive. It prevails everywhere over the Pacific and Indian Seas, as far as the Seychelles. It usually occurs of a large size, and very numerous in individuals, particularly where sand or fine coral abounds; in the latter, of

which it is apt to become dwarf, as I noticed at Bow Island. It also occurs as a fossil on the shores of the Red Sea:

Burton.

2. *T. STRIGATA*. (pl. xli. f. 10.) *Sowerby*, Tank. cat. p. 25. *T. elongata*, *Wood*, Index, Suppl. *T. flammea*, *Lesson*, Illust. de Zool. t. 48. *T. zebra*, *Kiener*, Iconographie, p. 5, t. 3, f. 5.

Testâ subulatâ, subturritâ, crassiusculâ, albidâ, strigis longitudinalibus atro-fuscis irregulariter ornatâ; anfractibus subplanulatis, versûs medium sulco impresso divisîs; columellâ nudâ, contortâ.

This fine species has a subulate acuminate shell, massive, the whorls flattish, duplicate or divided by an impressed line, the superior whorls, as occurs in nearly every species of *Terebra*, longitudinally plicate, elegantly ornamented with longitudinal strigæ, some of which are occasionally bifid, others only occupying half the diameter of the whorl, generally, however, they are simple and continuous throughout this space; aperture somewhat square; columella naked and twisted.

West Coast of America between Panama and Realejo, at the former of which places it is particularly abundant. The Indian locality assigned to it in *Wood's Index* is undoubtedly incorrect.

3. *T. FLAMMEA*. (pl. xlii. f. 36,) *Lamarck*, l. c. p. 284.

Testâ elongatè subulatâ, turritâ, albidâ, strigis longitudinalibus ornatâ; strigis rufis, obliquis, sæpiùs interruptis; anfractibus subrotundatis, mediò lineis duabus impressis cinctis, infernè subcoarctatis, superioribus longitrorsum nodoso-plicatis; aperturâ utrinque attenuatâ; columellâ nudâ, arcuatâ; breviter canaliculatâ.

Shell subulate, turrited, white, with longitudinal interrupted oblique red markings; whorls slightly rounded, traversed near the middle with two girdling lines, inferiorly the whorl somewhat contracted, superior whorls with numerous nodulous folds; aperture attenuated, with a short canal; columella naked.

Indian Seas: *Kiener*.

4. *T. SUCCINEA*. (pl. xlii. f. 40) *Hinds*, Proceed. Zool. Soc. 1843, p. 149.

Testâ subulatâ, acuminatâ, succineâ, lævigatâ; anfractibus planulatis, lineâ impressâ divisîs, longitrorsum plicis obsoletis vel lineis arcuatis incrementi minutis, transversim infrâ lineam impressam læviter striatis: areâ subconcovâ, punctis parvis

fuscis distantibus biseriatim cinctâ, versùs margines tuberculato-incrassatâ; columellâ contortâ, acutâ.

Shell subulate, acuminate, amber-coloured; whorls flattened, even a little contracted, girdled, longitudinally provided with small sharp arched folds, transversely lightly striated; on each margin of the inferior area is a series of distant reddish punctuations; last whorl sulcate at the base. Aperture somewhat oval. Columella twisted, with a very sharp margin.

Two specimens of this elegant species are in the collection of Mr. Cuming, without any history attached to them; they have evidently been highly cleaned, but retain the appearance of having been once covered by an epidermis.

The native country is unknown.

5. *T. ROBUSTA*. (pl. xlii. f. 35.) *Hinds*, l. c. p. 149.

Testâ turrato-subulatâ, solidâ, ponderosâ, albidâ, flammeis longitudinalibus interruptè pictâ; anfractibus inferioribus rotundatis, indivisis, lævigatis, superioribus versùs extremitatem spiræ subplanulatis, unocinguliferis, longitrorsum plicatis; anfractu ultimo rotundato, triseriatim picto, ad basin coarctato; aperturâ elongatâ; columellâ arcuatâ, subcallosâ; epidermide luteo-fuscâ; operculo parvo, crasso.

Shell elongated, subulate, turrited, smooth, solid, white, with interrupted longitudinal reddish-brown spots; whorls girdled, but only visible on the superior ones, the last with three series of markings, suddenly contracted inferiorly; aperture elongated, with a short canal; columella arched, and covered by a thin callus. Operculum small and thick. Epidermis thicker than is usual.

West coast of America, between  $8^{\circ} 57'$  and  $21^{\circ} 32'$  north latitude; namely at Panama, Gulf of Nicoya, Gulf of Papagayo, and San Blas; in from four to eighteen fathoms, sandy mud: Cuming and Hinds.

6. *T. ORNATA*. (pl. xlii. f. 34. *Gray*, *Proceed. Zool. Soc.* 1834, p. 62.

Testâ conico-subulatâ, turritâ, solidâ, albâ, maculis rufis subquadratis triseriatim ornatâ; anfractibus planulatis, angustis, lineâ valdè impressâ cinctis, aperturâ subquadratâ; columellâ arcuatâ, acutâ; breviter canaliculatâ; epidermide tenui indutâ.

Shell conical subulate, turrited, solid, white, with three series of reddish-brown square spots; whorls flat, narrow, deeply girdled; one series of spots above the girdle, rather smaller and paler than the others; two below it, which are

larger, more deeply coloured, and, on the upper whorls, sometimes confluent; last whorl short and contracted beneath, with four series of spots. Aperture inclined to square. Columella arcuate, with a sharp margin, slightly callous. Epidermis thin.

Galapagos Islands; in five to seven fathoms, coral sand : Cuming. Panama, in seven fathoms, mud.

7. *T. CRENULATA*. (pl. xli. f. 18, 19. pl. xlii. f. 32.) *Lamarck*, l. c. p. 284. *Buccinum crenulatum*, *Linnaeus*, Gmelin, No. 132. *B. candidum*, *Born*, Mus. p. 263, t. 10, f. 8. *Terebra maculata*, *Perry*, t. 16, f. 2.

Testâ subulatâ, turritâ, solidulâ, albidâ, strigis longitudinalibus fuscis interruptis ornatâ; anfractibus planulatis, sulco vix conspicuo divisâ, supernè tuberculis albis coronatis, biseriatim punctis rufis cinctis; columellâ subproductâ, rectiusculâ.

Shell subulate, turrit, heavy, polished, adorned with small interrupted irregular strigæ of a rufous colour; whorls divided by a groove not always very conspicuous, encircled by two series of punctated spots; columella rather produced, particularly in the older individuals, rather straight. Pl. xlii. fig. 32, represents a very pretty variety of this shell from the collection of Sir Edward Belcher, C.B., and which was procured at the Marquesas.

Marquesas Islands; Society Islands; Amboina. Fossil, Red Sea: Burton.

8. *T. DIMIDIATA*. (pl. xli. f. 7, 8.) *Lamarck*, l. c. p. 285. *Buccinum dimidiatum*, *Linnaeus*, Gmelin, No. 138. *B. ferrugineum*, *Born*, Mus. p. 263, t. 10, f. 7, *Terebra carnea*, *Perry*, t. 16, f. 1.

Testâ elongatè subulatâ, turritâ, politâ, carneâ, strigis albis longitudinalibus irregulariter ornatâ; anfractibus planulatis, striis arcuatis incrementi conspicuis, supernè sulco impresso divisâ; columellâ subcallosâ, rectiusculâ.

Shell truly subulate, polished, of a flesh colour, sometimes more intense, sometimes paler, interrupted by white strigæ which are occasionally united or broken in their course; whorls flattish, duplicate, the superior area less occupied by the white strigæ; aperture effuse; columella somewhat callous, and strait. The character of the ornation is very similar to that in *T. strigata*.

Tahiti, Society Islands; Amboina. Both the darker and lighter individuals are found at Tahiti, and do not appear to affect different localities.



9. *T. consors*. (pl. xlii. f. 26) *Hinds*, l. c. p. 150.

Testâ gradatim subulatâ, lævigatâ, politâ, albidâ, flammeis pallidis fuscis ornatâ; anfractibus subplanulatis, supernè lineâ impressâ divisâ, areâ superiore spiræ læviter tuberculatâ; anfractu ultimo propè basin fasciato; aperturâ infernè subeffusâ; columellâ nudâ, breviusculâ.

Shell subulate, turritid, smooth and polished, white, with pale brown flames; whorls flat, distinctly girdled near their upper margin, the superior area somewhat tubercled, last whorl banded at the base. Aperture oval, effuse, without any canal. Columella naked, smooth, truncate.

Its nearest ally is *T. dimidiata*, than which it is far more gradually subulate; the upper area of the divided whorl is raised and somewhat rounded; the white is the base colour of the shell, and the last whorl is distinctly banded.

Tahiti, Society Islands.

10. *T. argus*. (pl. xliii. f. 64.) *Hinds*, *Proceed. Zool. Soc.* 1843, p. 160. *T. nebulosa*, *Kiener*, *Iconographie*, p. 23, t. 10, f. 22.

Testâ elongatè subulatâ, turritâ, politâ, albescente, maculis subquadratis saturatoribus seriatim cinctâ; anfractibus vix rotundatis, supernè sulco impresso divisâ; aperturâ oblongâ; columellâ subarcuatâ, acutâ.

Shell elongated, subulate, turritid, polished, white, with three series of cream-coloured square spots, of which the middle is rather the larger; whorls flat, girdled above, destitute of any sculpture. Aperture oblong. Columella subarcuate. Canal very short.

The name attached to this shell by M. Kiener had been previously used by Mr. Sowerby, so that a change became necessary.

Tahiti, Society Islands: Cuming. Nukahiva, Marquesas.

11. *T. muscaria*. (pl. xli. f. 17, 20. pl. xlii. f. 41.) *Lamarck*, l. c. p. 285.

Testâ subulatâ, turritâ, solidâ, politâ, albidâ; anfractibus planulatis, supernè sulco divisâ, maculis subquadratis rufo-fuscis treseriatim cinctis, ultimo quadriseriatim ornato; aperturâ effusâ, intus pallidâ; columellâ rectiusculâ, subtruncatâ.

Shell elongated, subulate, polished, white, approaching to chesnut; whorls flat, divided by a groove, ornamented with three series of squarish reddish-brown spots, a fourth series appearing on the last whorl; columella straight and somewhat

truncate. The shell represented at fig. 20, seems to have been regarded as *Buccinum hecticum* of Gmelin, and recently figured as such by Potiez, but I do not regard it as other, and that apparently not uncommon, than an abnormal development of *T. muscaria*. The undeviating character of the decoration on the latter is only to be rivalled by that of *T. subulata*, and whilst both these species are eminently alike in their style of markings, they are as decidedly distinct from the tenacity with which each adheres to that which is peculiarly its own. Society Islands; Feejee Islands.

12. *T. TIGRINA*. (pl. xlii. f. 30.) Gray, l. c. p. 59. *Buccinum tigrinum*, (bis.) Gmelin, No. 135. *B. felinum*, Dillwyn, v. ii. *Terebra felina*, Sowerby, Tank. Cat. p. 76.

Testâ conico-subulatâ, acuminatâ, lævigatâ, albâ, uniseriatim maculatâ; anfractibus planulatis, supernè lineâ impressâ divis, infernè maculis rufis uncinatis, anfractu ultimo iteratis; aperturâ ovali, effusâ; columellâ breviusculâ, nudâ.

Shell conico-subulate, acuminate, smooth, white on the inferior part of the whorl, with a single series of reddish-brown spots; whorls flat, distinctly girdled, smooth and polished, the last fuller than usual, and with two rows of spots. Aperture oval, effuse, without any canal. Columella rather short, naked, and a little twisted.

It would seem quite time that attention was drawn to some of these long known shells, since they continue almost scarce in collections, and we are not satisfied, as in the present case, that their native country is correctly known.

13. *T. DUPLICATA*. (pl. xli. f. 1, 2, 3, 4.) Lamarck, l. c. v. vii. p. 286. *Buccinum duplicatum*, Linnaeus, Gmelin, No. 136. *Terebra Lamarkii*, Kiener, p. 30, t. 9, f. 19.

Testâ subulatâ, turritâ, politâ, cinereâ, rariùs castaneâ vel atro-fuscâ; anfractibus planulatis, supernè sulco divis, longitudinaliter creberrimè plicatis; propè suturam fasciâ pallidâ cinctâ, anfractu ultimo duplicatâ; aperturâ intùs fuscâ; columellâ contortâ.

Variat fasciâ maculis rufis transversis ornatâ.

Shell subulate, turrited, polished, usually of an ash or blueish gray, but sometimes fulvous, or even of a dark red colour as in fig. 1; whorls divided by a groove and thickly plicate longitudinally; close to and above the suture is a faint narrow band, which also appears on the back of the last whorl. There is a variety in which this band is articulated by reddish transverse spots, fig. 2, and which M. Kiener

has described as *T. Lamarckii*, but which seems to me to have no specific importance.

Zanzibar ; Singapore ; Majambo Bay, Madagascar. Fossil—Shores of the Red Sea : Burton.

14. *T. DUSSUMIERII*. (pl. xli. f. 9.) *Kiener*, l. c. p. 31, t. 8, f. 17.)

Testâ elongatè subulatâ, turrîtâ, griseâ, fulvo fasciatâ : anfractibus sulco impresso divisis, longitrorsum valdè plicatis ; aperturâ elongatè ovali ; columellâ subrectâ.

A fine characteristic species distinguished by its numerous sharp folds, and varied markings ; the upper area of the divided whorl is more contracted than the inferior, and thus on a lower plane ; the suture is bordered by clear milk-white, and the centre of the whorl is broadly banded of a dark chesnut colour ; aperture more elongated than is usual ; columella somewhat straight.

Haynan, China : Humphreys.

15. *T. SUBULATA*. (pl. xli. f. 16, pl. xlii. f. 38, 39.) *Lamarck*, l. c. v. vii. p. 286. *Buccinum subulatum*, *Linnaeus*, *Gmelin*, No. 131. *Terebra fusca*, *Perry*, *Conchology*, t. 16, f. 3.

Testâ elongatè subulatâ, turrîtâ, politâ, albidâ ; anfractibus planulatis, angustis, sulco vix conspicuo divisis, maculis quadratis rufo-fuscis biseriatis cinctis, ultimo triseriatim ornato ; aperturâ subquadratâ ; columellâ nudâ, contortâ.

Shell very lengthened, subulate, turrited, polished ; whorls divided by a groove which is scarcely conspicuous except on the upper whorls, adorned with two series of dark red spots of a square shape, a third appearing on the last whorl ; from the flattening of the last whorl the aperture is somewhat square ; columella twisted acute. At plate xlii. fig. 38, a constant variety is represented of a paler colour, and with the spots smaller, at greater distances, and of a fawn colour.

Tahiti, Society Islands ; Bow Island ; Moluccas.

16. *T. OCULATA*. (pl. xlii. f. 31.) *Lamarck*, l. c. v. vii. p. 286.

Testâ elongatè subulatâ, turrîtâ, pallidè fulvâ ; anfractibus subplanulatis, lineâ impressâ divisis, supernè subtumidis, maculis albis subdistantibus cinctis, ultimo subquadrato biseriatis maculato ; aperturâ subquadratâ ; columellâ contortâ, acutâ, albidâ, breviter canaliculatâ ; epidermide tenui indutâ.

Shell elongated, subulate, acuminate, turrited, smooth, of a fawn colour ; whorls girdled, the impressed line not being

very perceptible on the inferior whorls; above tumid, and ornamented with a series of roundish white spots, placed somewhat distant and doubled on the last whorl; aperture squarish, and with a short but decided canal; columella naked, twisted, and with a sharp margin. A thin epidermis covers many individuals.

Pomoutou and Society Islands, in the South Pacific; Moluccas.

17. *T. SPECTABILIS*. (pl. xlv. f. 88, 89.) *Hinds*, l. c. p. 150.

Testâ subulatâ, lævigatâ, politâ; anfractibus supernè sulco impresso divisis, infrâ longitrorsum plicatis, interstitiis lævigatis, medio saturatè castaneis, infernè albis; cingulo tuberculato, albido; anfractu ultimo fasciato; columellâ contortâ elongatâ.

An elegant glittering species, well distinguished by its ornation, though scarcely by its sculpture. The area above the girdling is white, sometimes of a pale brown; beneath, and in the middle of each whorl, of a dark chesnut; and a narrow portion just above the suture is of a clear milk white, and the last whorl is similarly banded. A very distinct canal exists. The pale individual figured has most probably lost its colour.

Guinea, on the sands: Humphreys. Sumatra, on the sands: Ellis.

18. *T. GEMMULATA*. (pl. xlv. f. 92.) *Kiener*, l. c. p. 15, t. 5. f. 11.

Testâ subulatâ. subturritâ, fulvescente, anfractibus subplanulatis, supernè sulco impresso divisis, longitrorsum plicatis, suprâ biseriatim tuberculatis, propè suturam et cum anfractu ultimo albo cinctis; aperturâ utrinque attenuatâ; columellâ nudâ, rectiusculâ, canali mediocri.

The superior portion of each whorl is rather contracted, and here it is provided with two series of small rounded tubercles; the lower of the two is white, and from each originates a slightly arched fold. The last whorl has a conspicuous white band, with a dark brown base.

Native country unknown.

19. *T. COPULA*. (pl. xlii. f. 76.) *Hinds*, l. c. p. 151.

Testâ elongatè turrito-subulatâ, acuminatâ, lævigatâ, nitidâ, saturatè castaneâ; anfractibus subrotundatis, supernè cingulo tuberculato cinctis, infrâ plico-costatis; cingulo atro-castaneo fasciato, rarè intervallis tantùm maculatis, interstitiis lævigatis; anfractu ultimo parvo, rotundato, propè basin duabus



fasciis albis angustis ornato; columellâ, nudâ, contortâ, acutâ.

Highly polished, and of a dark chesnut; the upper series of tubercles having their intestices picked out with black, sometimes almost in a continuous band. The folds are delicate, and sharp, with the intervening spaces highly polished. Two narrow pale lines cross the last whorl.

Guinea, on the sands: Humphreys.

20. *T. FATUA*. (pl. xlii. f. 28.) *Hinds*, l. c. p. 150.

Testâ turrito-subulatâ, albidâ, lævigatâ, politâ; anfractibus subplanulatis, superioribus lineâ impressâ cinctis, maculis fuscis pallidis distantibus biserialim ornatis; spirâ obsoletè plicatâ; anfractu ultimo elongato, maculis exceptis, unicolore.

Shell subulate, subturrited, white, smooth; whorls flat, lengthened, polished, the upper girdled, ornamented on the margins with two series of very pale somewhat distant brown spots; last whorl elongated, those of the spire plicate. Aperture elongated, effuse. Columella straight, truncate; no canal.

St. Christopher, West Indies, on the sand: Miller, 1799.

21. *T. ALBIDA*. (pl. xliii. f. 56.) *Gray*, l. c. p. 63.

Testâ conico-subulatâ, subturritâ, albâ, lævigatâ; anfractibus planulatis, lineâ impressâ obsoletè divisis, ultimo rotundato; aperturâ effusâ; columellâ nudâ, contortâ.

Shell conical subulate, somewhat turrited, white, and perfectly smooth; whorls flat, and divided by a girdling line, which is not readily visible, destitute of any sculpture; last whorl rounded. Aperture effuse, with a very short canal. Columella naked, twisted.

New South Wales, on the sands: Humphreys.

22. *T. CHLORATA*. (pl. xlii. f. 29.) *Lamarck*, l. c. v. vii. p. 288. *T. Knorrii*, *Gray*, l. c. p. 59.

Testâ conico-subulatâ, acuminatâ, subturritâ, lævigatâ, politâ, albâ, strigis maculisque fuscis confusè longitudinaliter pictâ; anfractibus planulatis, suprâ medium lineâ impressâ cinctis, ultimo elongato interruptè fasciato; aperturâ ovali, effusâ; columellâ contortâ; canali nullo.

Shell conico-subulate, acuminate, somewhat turrited, smooth and polished, white, with aggregated brown spots, strigæ, and lines, sometimes disposed to banding; whorls flat, smooth and girdled, the last lengthened and banded.

Aperture oval, effuse, without any canal. Columella naked and twisted. Seychelles : Dufo.

23. *T. RAPHANULA*. (pl. xlv. f. 94.) *Lamarck*, l. c. v. vii. p. 288.

Testâ elongatè ovato-subulatâ, acuminatâ, subturritâ, politâ, albâ, maculis oblongis pallidè fuscis seriatim ornatâ; anfractibus subplanulatis, supernè sulco divisus, longitrorsum capillari-plicatis, interstitiis lævigatis; anfractu ultimo elongato fasciato; aperturâ utrinque attenuatâ; columellâ nudâ, rectiusculâ, subtruncatâ; canali nullo.

Highly polished and glittering, the girdled whorls covered with numerous small sharp folds, and ornamented by pale brown oblong spots, placed methodically in the transverse direction. Amboina.

24. *T. CERITHINA*. (pl. xliii. f. 58.) *Lamarck*, l. c. v. vii. p. 288.

Testâ obeso-subulatâ, acuminatâ, subturritâ, politâ, pallidâ, rufo-fusco strigatâ; anfractibus subrotundatis, lineâ impressâ divisus, longitrorsum plicatis; plicis anfractuum superiorum conspicuis, inferiorum evanidis, interstitiis saturatoribus; anfractu ultimo attenuato, subfasciato; aperturâ effusâ, pallidâ; columellâ anticè productâ; canali nullo.

Distinctly obesely subulate, the whorls covered by longitudinal folds, but those of the last three or four are so smooth or apparently worn, as to be scarcely salient from the surface of the shell. The columella has rather a thick callus. The portions of the folds above the girdling are distinguished by no peculiarity of conformation, which is unusual.

Philippine Islands : Cuming. Bow Island ; Society Islands ; Feejee Islands.

25. *T. CÆRULESCENS*. (pl. xli. f. 5, 6, 15.) *Lamarck*, l. c. v. vii. p. 288.

Testâ elongatè conico-subulatâ, subturritâ, politâ, cinereâ, nigricante, aut albo variegatâ; anfractibus planulatis, indivisis, aperturâ effusâ; columellâ nudâ, rectiusculâ, truncatâ.

Shell elongated, conical, subulate, acuminate, polished, varying greatly from an ash or dark colour to becoming partially white, or in old individuals entirely so; whorls undivided, the last somewhat rounded; columella short, smooth, straight, and truncated.

New Holland : *Lamarck*. Society Islands ; Feejee Islands. It usually is found in considerable numbers.

26. *T. NIMBOSA*. (pl. xlii. f. 21.) (*Hinds*, l. c. p. 151.

Testâ elongatè conico-subulatâ, acuminatâ, lacteâ, strigis

longitudinalibus nubeculatâ; anfractibus planulatis, lævigatis, politis, integris, internè propè suturam albo angustè fasciatis, ultimo fasciato; aperturâ effusâ; columellâ lævi, truncatâ.

Shell elongated, conico-subulate, acuminate, milky white, figured with aggregated slightly waved pale brown strigæ, ceasing suddenly a little above the suture, thus appearing narrowly banded with white; whorls smooth, entire, the last elongated. Aperture oval, effuse, without the least appearance of a canal. Columella, smooth, straight, and truncate.

Habitat unknown.

27. *SENEGALENSIS*. (pl. xli. f. 11, 12, 13, 14.) *Lamarck*, l. c. v. vii. p. 287. *T. striatula*, *Lamarck*, l. c. v. vii. p. 288. *T. fusco-maculata*, *Sowerby*, *Tank. cat.* p. 23.

Testâ subulatâ, turritâ, nitidâ, longitudinaliter plico-striatâ, cinereâ, cærulescente, rariùs carneâ, strigis albis ornatâ; anfractibus planulatis, supernè sulco divisus, transversim interruptè fasciatis, ultimo elongato, læviusculo; columellâ rectiusculâ.

Shell subulate, acuminate, turritated, longitudinally striated, but varying greatly in intensity, sometimes coarse, even to folds, at others nearly smooth and polished; fluctuating equally in colour, the prevailing being a gray or blueish ash colour, and varying to chesnut and flesh colour; whorls divided by a groove, and disposed to be banded transversely; last whorl rather elongated; columella straight, and slightly truncate. The variety of character assumed by different individuals is no doubt the reason why it has been described more than once. *M. Kiener's* figure, t. 9. f. 18, represents *T. striatata*, and not this shell.

Gambia, and other localities on the West Coast of Africa.

28. *T. CINGULA*. (pl. xliii. f. 45.) *Kiener*, l. c. p. 28, t. 8, f. 16.

Testâ subulatâ, turritâ, cinereâ, confusè fasciatâ; anfractibus planulatis lineâ impressâ divisus, superioribus plicatis, inferioribus lævigatis, areâ superiore subtumidâ, sparsim maculis rufis cinctâ; anfractu ultimo elongato; aperturâ attenuatâ; columellâ nudâ, rectiusculâ; canali nullo.

Shell subulate, turritated, ash colour, indistinctly banded; whorls flat, girdled, the superior with small folds, the inferior smooth, upper area slightly tumid, and ornamented by rather distant rufous spots; last whorl elongated. Aperture attenuate. Columella naked, rather straight. No canal.

Habitat unknown.

29. T. LAURINA. (pl. xlii. f. 27.) *Hinds*, l. c. p. 152.

Testâ elongatè subulatâ, acuminatâ, lævigatâ, politâ, olivaceâ; anfractibus planulatis, plicis tenuibus sinuosis, capillaribus, infrâ evanidis, supernè lineâ impressâ obsoletâ cinctis, ultimo unicolore, lævigato; aperturâ fuscâ, effusâ; columellâ lævi, subtruncatâ.

Shell elongated, subulate, acuminate, smooth, polished, of an olive colour; whorls flat, above indistinctly girdled, with numerous fine longitudinal folds. Aperture oval, effuse, brown within. Columella straight, naked, truncate. No canal.

Western Africa, in sandy mud: Rev. W. V. Hennah.

30. T. STYLATA. (pl. xliv. f. 79.) *Hinds*, l. c. p. 152.

Testâ subulatâ, acuminatâ, politâ, olivaceâ; anfractibus subplanulatis, integris, numerosè plicatis, infrâ evanidis, propè suturam albidis maculis fuscis interruptè fasciatis, ultimo lævigato, infernè albo angustè fasciato: aperturâ fuscâ; columellâ lævi, subtruncatâ.

The whorls are undivided, and at their upper part furnished with numerous small, almost capillary folds, which disappear about the middle, leaving the inferior portion quite smooth, and, at the sametime, of a paler colour. The folds are crossed, just beneath the suture, with transverse narrow dark spots. The aperture is much darker than the rest of the shell.

Japan; Philippine Islands.

31. T. CASTANEA. (pl. xliii. f. 59.) *Kiener*, l. c. p. 19. t. 7. f. 14.

Testâ elongatè conico-subulatâ, subturritâ, nitidâ, castaneâ; anfractibus planulatis, sulco impresso divisus, longitrorsum acutèplicatis; interstitiislævigatis; aperturâ supernè attenuatâ; columellâ nudâ, rectiusculâ, subtruncatâ; canali nullo.

The folds are separated by distinct smooth spaces, and are sharp and nearly straight; the girdling is effected more by the cessation of the folds, than by any constriction. The colour is a very dark chesnut, with sometimes a slight appearance of white near the sutures; the last whorl is banded by white, and its base is somewhat tubercular.

Mauritius: Kiener. Guinea: Humphreys.

32. T. PERTUSA. (pl. xlii. f. 42, 43.) *Basterot*, *Buccinum pertusum*, *Born*, Mus. p. 267, t. 10, f. 13. *Terebra undata*, *Defrance*, Dict. des Scien. Nat.

Testâ elongatè subulatâ, subturritâ, nitidâ, fulvâ; anfractibus planulatis, longitrorsum plicatis, lineâ impressâ cinctis, interstitiis plicarum areæ superioris rufo-fusco pictis, lineis



interruptis transversim exculptis; aperturâ subquadratâ, breviter canaliculatâ.

Shell elongated, subulate, subturrit, yellow, varying to brown; whorls flat, longitudinally plicate, traversed transversely in the intervals between the folds by impressed lines, of which one larger and deeper than the rest represents the girdle. The intervals between the folds of the superior area is richly painted of a deep reddish brown. A short but distinct canal.

This is one of those shells with which the earlier Conchologists were familiar, and it is far better figured by Born than in other more recent works; indeed, Kiener's figure is scarcely recognizable. Yet though so long known, it continues far from common in collections, and we are ignorant of its native country. Fossils from Bordeaux and the south of Europe have been assigned by Basterot and Bronn to this species.

33. *T. NEBULOSA*. (pl. xliii. f. 51.) *Sowerby*, Tank. Cat. p. 25.

Testâ elongatè conico-subulatâ turritâ, nitidâ, albâ, maculis magnis aurantiaco-rufis confusè pictâ; anfractibus planulatis, supernè sulco punctato divisis, longitrorsum plicatis: plicis obtusis, approximatis, subarcuatis, interstitiis striatis; anfractu ultimo fasciato. ad basin rufescente; aperturâ elongatè ovali; columellâ nudâ, rectiusculâ.

The girdling is here distinguished by the presence of a punctuation between each fold. The folds are large and broad, and with the interstices striated. The prevailing colour is white, but the shell is handsomely painted with large irregular orange-red spots or blotches, and the base and aperture are of the same uniform colour. The last whorl is banded with white.

Native country unknown.

34. *T. ALVEOLATA*. (pl. xlv. f. 120.) *Hinds*. l. c. p. 151.

Testâ turrito-subulatâ, attenuatè acuminatâ, nitidâ, fuscâ; anfractibus subplanulatis, supernè cingulo tuberculato cinctis, infrâ plico-costatis, interstitiis striatis; cingulo et anfractu ultimo albo fasciato, maculis quadratis rufis articulato.

The description is drawn up from a somewhat young specimen in the collection of Sir E. Belcher, and the mouth and last whorl have not yet attained their full development. The character of the shell is, however, very conspicuous. In this genus the last whorl will be found very frequently

to offer decided features, and becomes a valuable aid in the diagnosis.

Straits of Malacca; in seventeen fathoms among mud.

35. *T. SPECILLATA*. (pl. xlv. f. 96. pl. xlv. f. 116.) *Hinds*, l. c. p. 155.

Testâ gracilè turrito-subulatâ, valdè acuminatâ, albâ, rufo sparsim maculatâ et nebulosâ; anfractibus subplanulatis longitrorsum subdistanter tenuè plico-costatis, transversim læviter striatis, supernè cingulo tuberculato, interstitiis tubercolorum præcipuè pictis; anfractu ultimo fasciato; aperturâ parvâ; columellâ subrectâ.

The spire is attenuated and acuminate, of a dead white irregularly clouded with brown, but much more intense among the series of tubercles; the folds are distant, not very prominent, and nearly straight. Aperture attenuated, and terminating in a canal.

San Blas, Mexico; in seven fathoms, sandy mud.

36. *T. CONSPERSA*. (pl. xlv. f. 74.) *Hinds*, l. c. p. 153.

Testâ turrito-subulatâ, nitidâ, albâ; anfractibus subrotundatis, plico-costatis, supernè lineâ impressâ, præcipuè interstitiali, cinctis, propè suturam punctis rufis rarè conspersis, interstitiis striatis; anfractu ultimo ad basin fulvo; columellâ nudâ, contortâ.

A pretty little species, only known to me through the two specimens in the collection of Mr. Cuming; and it will readily be distinguished by its sparsely scattered rufous spots and orange base.

Catbalonga, Island of Samar, Philippines; eight fathoms, sandy mud: Cuming.

37. *T. VARICOSA*. *Hinds*, l. c. p. 152.

Testâ elongatè conico-subulatâ, acuminatâ, nitidâ; anfractibus subplanulatis, plico-costatis, supernè cingulo tuberculato contracto cinctis; costis subdistantibus, albidis, interstitiis striatis fuscis; anfractu ultimo breviusculo, rotundato, albo, fasciato; columellâ contortâ.

Gulf of Papagayo, west coast of Central America; in twenty-three fathoms, mud.

38. *T. FRIGATA*. (pl. xlv. f. 71.) *Hinds*, l. c. p. 162. *T. gracilis*, *Gray*, l. c. p. 61.

Testâ elongatè conico-subulatâ, acuminatâ, turritâ, politâ, nitidâ, pallidâ; anfractibus planulatis, supernè lineâ impressâ divisis, plicatis, interstitiis striatis; areâ superiore tuberculis



rotundatis instructâ; plicis internè subtuberculosis; aperturâ utrinque attenuatâ; columellâ contortâ.

The individuals before us appear to have lost all their colour, and are uniformly pale. The folds are remarkable from terminating at their inferior extremity in a swelling or tubercle. A fossil species had previously received Mr. Gray's name.

Africa: Gray. Gallapagos Islands; in six fathoms, coral sand: Cuming.

39. *T. PLUMBEA*. (pl. xlv. f. 70.) *Quoy*, *Voy. de l'Astrolabe*, p. 470, t. 36, f. 29, 30.

Testâ subulatâ, acuminatâ, turritâ, politâ, nitidâ, nigricante; anfractibus planulatis, integris, supernè juxtâ suturam albidis, infrâ saturatoribus, plicatis; aperturâ effusâ, atro-fuscâ; columellâ nudâ, rectiusculâ.

A neat highly polished shell with entire whorls and longitudinal folds. The whorls at their upper margins are pale, and immediately beneath of a more intense dark than elsewhere.

Moluccas: Quoy and Gaimard. Cagayan, Island of Misamis, Philippines: Cuming.

40. *T. NITIDA*. (pl. xlv. f. 103.) *Hinds*, l. c. p. 152.

Testâ obeso-subulatâ, acuminatâ, pallidè plumbeâ, politâ; anfractibus subplanulatis, rectè plico-costatis, supernè interstitiis lineâ punctatâ cinctis, ultimo parvo subattenuato, unicolore, plicis evanidis; labio interno producto; labro anticè subsinuoso.

An excellent diagnostic character exists in this species, in the circumstance that the girdling line which traverses the upper part of each whorl does not cross the ribs, but is confined to the interstices.

Marquesas; in seven fathoms, sandy mud.

41. *T. HASTATA*. (pl. xlv. f. 87.) *Sowerby*, l. c. p. 76. *Buccinum hastatum*, *Gmelin*. *Terebra costata*, *Menke*. *Syn. Mus.* p. 84.

Testâ subulatâ, cylindraceâ, acuminatâ, subturritâ, politâ, albâ, brunneo subfasciatâ; anfractibus planulatis, integris, plicis numerosis politis, ultimo attenuato, fasciato; aperturâ attenuatâ; columellâ nudâ, rectâ, truncatâ; canali nullo.

Remarkably cylindrical, acuminate, white, the lower portions of the whorls irregularly ornamented with pale brown. The whorls are entire, with numerous polished folds continuous throughout their breadth. Native country unknown.

42. *T. CASTA*. (pl. xlv. f. 84.) *Hinds*, l. c. p. 156.

Testâ obeso-subulatâ, subturritâ, albescente, lævigatâ, politâ; anfractibus integris, planulatis, supernè plicatis et lacteo fasciatis, infrâ lævigatis, strigis longitudinalibus pallidè fuscis nebulosis; anfractu ultimo sub-elongato, lacteo fasciato columellâ brevî, subrectâ; canali nullo.

The milky white colour is broken by longitudinal markings of a pale brown; a narrow banding, however, of uninterrupted white transverses the superior part of each whorl, and also the last whorl. The folds are delicate and numerous, disappearing towards the middle of the whorl. Aperture effuse. Columella truncate. No canal. This species is not girdled, though from the distribution of the colouring, it might at first appear so; and it will thus be readily distinguished from *T. raphanula*, which is decidedly so.

Ilo-ilo, Island of Panay, Philippines, at low water: Cuming.

43. *T. RUDIS*. (pl. xliii. f. 60.) *Gray*, l. c. p. 60. *T. Petitii*, *Kiener*, l. c. p. 37, t. 13, f. 32.

Testâ elongatè conico-subulatâ, acuminatâ, turritâ, pallidâ; anfractibus planulatis, subangustis, supernè sulco divisîs; plicis subrectis, brevibus, lineis duabus vel tribus impressis decussatis; aperturâ utrinque attenuatâ; columellâ nudâ, contortâ; breviter canaliculatâ.

So closely allied to *T. plicata*, that description must fail to distinguish them; yet on comparison, they are conspicuously distinct. The present is more elongated and coarser, the whorls are narrow and provided with short solid ribs, nearly or quite straight; and these are crossed by two, or perhaps three transverse lines. *T. plicata* is highly polished, the ribs are longer, delicate and sharp, placed somewhat at a distance, and very regularly crossed by three or sometimes four lines.

New York and Philadelphia: Kiener.

44. *T. PLICATA*. (pl. xliii. f. 61.) *Gray*, l. c. p. 61.

Testâ conico-subulatâ, acuminatâ, turritâ, pallidâ, nitidâ; anfractibus planulatis, supernè cingulatis, longitrorsum plicatis; plicis acutis, subarcuatis, transversim lineis definitis, circâ quatuor, exsculptis; aperturâ oblongâ, subquadratâ; columellâ nudâ, contortâ, acutâ; breviter canaliculatâ.

Shell conical subulate, acuminate, turritid, of an uniform pale cream-colour, shining; whorls flat, with slightly sinuous folds, girdled above, with about four transverse very regular



impressed lines; last whorl obscurely banded. Aperture rather square. Columella naked, twisted. A short canal.

Guayaquil; in seven fathoms, sandy mud: Cuming.

45. *T. EBURNEA*. (pl. xlv. f. 123.) *Hinds*, l. c. p. 153.

Testâ obeso-subulatâ, albâ; anfractibus lævigatis, nitidis, supernè lineâ impressâ, infernè uni-vel biseriatim lineis punctatis, cinctis; anfractu ultimo seriebus quinque linearum punctarum; aperturâ elongatâ; columella lævi, breviusculâ.

Solid, like ivory, the inferior whorls obese and smooth, the superior plicate, above girdled by a punctated line; one or two others, similar but less conspicuous, transverse the inferior part, and on the last whorls these are several times repeated. The columella is truncate, and slightly callous.

Seychelles.

46. *T. AMANDA*. (pl. xlv. f. 100.) *Hinds*, l. c. p. 154.

Testâ elongatè conico-subulatâ, nitidâ; anfractibus planulatis, supernè cingulo tuberculato margaritaceo cinctis, infrâ secundo minore concolore, infernè aurantiacis biseriatim punctato-lineatis, ultimo brevi; aperturâ parvâ, quadratâ; columellâ contortâ.

An uncommonly pretty shell, offering an elegant contrast between the row of pearly tubercles and the general orange colour. It is only known to me from two individuals in the collection of Sir Edward Belcher, and as neither of these has attained mature age, the characters of the columella are wanting.

Straits of Macassar; in eleven fathoms, coarse sand.

47. *T. TESSELLATA*. (pl. xlv. f. 124,) *Gray*, l. c. p. 61.

Testâ subulatâ, turritâ, lævigatâ, albâ, brunneo interruptè trifasciatâ; anfractibus planulatis, supernè seriebus duobus tuberculorum instructis; aperturâ quadratâ; columellâ contortâ; canali mediocri.

A single specimen only of this species exists, and which is in the collection of the British Museum.

Native country unknown.

48. *T. LIGATA*. (pl. xlv. f. 117, 118.) *Hinds*, l. c. p. 153.

Testâ elongatè subulatâ, acuminatâ; anfractibus planulatis, transversim striatis, cingulis duobus tuberculatis, cingulo superiore et areâ inferiore maculis quadratis fuscis transversis ornatâ, cingulo inferiore minore albidâ concolore; anfractu ultimo parvo, biseriatim maculato.

An attractive shell, which though like *T. triseriata* it pos-

sesses two rows of tubercles, there is little fear of confounding with it. The spots here are transverse, which is rather a peculiarity. The pale individual figured has most probably been deprived of its colour.

Marquesas; in seven fathoms, sandy mud.

49. *T. LINGUALIS*. (pl. xliii. f. 50.) *Hinds*, l. c. p. 153.

Testâ turrito-subulatâ, albidâ, flammeis atro-fuscis longitudinalibus ornatâ; anfractibus planulatis, lineis duabus impressis divis, infrâ suturam tuberculatis; areâ inferiore lævigatâ; anfractu ultimo subrotundato, lævigato, fasciato; aperturâ quadratâ; columellâ contortâ; canali reflexo.

Shell subulate, turrited, white, with richly coloured dark red flames, occasionally confluent; whorls about twenty, flat, above with a girdling line, a second often invisible on the inferior portion of the whorl or in the upper ones, upper part with coarse tubercular folds, becoming nearly smooth below; last whorl banded. Aperture square; columella twisted; canal reflexed.

The whorls, particularly those of the spire, are divided into three spaces by two girdling lines; the lower area is smooth, but the two others, particularly the most superior, is tubercled. It is a handsome species, from the deep reddish-brown flames with which it is covered.

Gulf of Papagayo, and Bay of Montejo, west coast of America; ten to seventeen fathoms, sandy mud: Cuming and Hinds.

50. *T. CORRUGATA*. (pl. xliii. f. 62.) *Lamarck*, l. c. v. vii. p. 287. *T. punctata*, *Gray*, l. c. p. 61.

Testâ longissimè subulatâ, turritâ, solidâ, pallidâ; anfractibus numerosis, angustis, supernè lineâ impressâ divis; areâ superiore tumidâ, nodoso-plicatâ, interstitiis rufo-fusco pictis; areâ inferiore contractâ, lævi, strigis longitudinalibus, rariùs biseriatim, ornatâ; aperturâ parvâ, quadratâ; columellâ nudâ, contortâ, acutâ, biplicatâ, plicâ inferiore majore; canali reflexo.

Shell slender, subulate, turrited, of a pale colour; whorls numerous, about 24, narrow, girdled, the superior area tumid, with nodulous folds, the interstices filled with reddish-brown spots, the inferior area contracted, smooth, with longitudinal spots, sometimes arranged transversely in two series, of which the superior is by far the smaller; last whorl very short. Aperture square. Columella naked, twisted, with two folds, the inferior being the larger. Canal reflexed.

Native country unknown.

51. *T. FUNICULATA*. (pl. xliii. f. 63.) (*Hinds*, l. c. p. 153.

Testâ elongatè subulatâ, turritâ, nitidâ, fulvâ; anfractibus numerosis, planulatis, supernè cingulo lævi lineâ impressâ divisio, infrâ cingulo minore, areâ inferiore transversim striatâ; anfractu ultimo brevi, medio sulco unico; aperturâ parvâ, concolore; columellâ subarcuatâ, acutâ, anticè productâ; canali breviusculo.

The area above the girdle is smooth and traversed by a single line, beneath it is tumid, so as to resemble a smaller and second girdling. A remarkable single groove crosses the last whorl near its middle.

Native country unknown.

52. *T. TRICOLOR*. (pl. lxiv. f. 82.) *Sowerby*, Tank. cat. p. 24. *T. tæniolata*, *Quoy*, *Voy. de l'Astrolabe*, p. 466, t. 36, f. 25, 26.

Testâ elongatè subulatâ, acuminatâ, turritâ, lævigatâ, tricolore; anfractibus numerosis, planulatis, lævibus, supernè lineâ impressâ divisio; areâ superiore albâ, areâ inferiore carneâ, lineâ impressâ et propè suturam lineâ rufâ bicinctâ; anfractu ultimo tricineto; aperturâ subquadratâ; columellâ anticè productâ.

Shell gracefully subulate, perfectly smooth, except that the whorls are girdled, and bear the marks of the arched lines of growth. The superior area is white, and the inferior of a flesh colour; and the line and also the lower part of each whorl close to the suture, has a narrow red line; an additional one also appears at the base of the last whorl.

Tongatabu: Quoy and Gaimard. Island of St. Thomas: Sowerby. It is not probable that both these localities are correct.

53. *T. MONILIS*. (pl. xliii. f. 65, 66.) *Quoy*, *Voy. de l'Astrolabe*, p. 47. t. 36, f. 21, 22.

Testâ gracilè subulatâ, acuminatâ, turritâ, luteâ, fulvâ, vel fusciscente, unicolore; anfractibus planulatis, lineâ impressâ divisio, areâ superiore tuberculis quadratis pallidis cinctâ, inferiore lævigatâ politâ, lineis duabus impressis, nonnumquam obsoletis, instructâ; aperturâ subquadratâ; columellâ acutâ, anticè productâ.

Shell gracefully subulate, acuminate, turrited, pale yellow, orange, or brown; whorls flat, girdled, the superior area occupied by a single series of square pale pustular looking tubercles, the inferior smooth and polished, and traversed by two impressed lines, which are often obsolete. Aperture small, rather square, with a short canal. Columella produced forward, with an acute margin.

Native country unknown.

54. *T. CINGULIFERA*. (pl. xlii. f. 24, 25.) *Lamarck*, l. c. v. vii. p. 289. *T. punctulata*, *Sowerby*. Tank. cat. p. 24. *T. punctato-striata*, *Gray*, l. c. p. 61.

Testâ longissimè subulatâ, turritâ, lævigatâ, flavescente; anfractibus numerosis supernè lineâ valdè impressâ divisis, transversim lineis subdistantibus punctato-striatis indutis; aperturâ parvâ, subquadratâ; columellâ arcuatâ, productâ; canali brevi.

Shell lengthened, subulate, turrited, smooth, pale yellow; whorls numerous, girdled, beneath with a few definite punctated transverse lines. Aperture squarish, with a short canal. Columella arched, produced forward.

New Holland: Kiener. Annaa, South Pacific; Ilo-ilo, Island of Panay, and Island of Burias, Philippines: Cuming. Tahiti, Society Islands.

55. *T. BABYLONIA*. (pl. xliii. f. 67.) *Lamarck*, l. c. v. vii. p. 287. *T. striata*, *Gray*, l. c. p. 60.

Testâ elongatè subulatâ, turritâ, lævigatâ, nitidâ, pallidè rufescente; anfractibus planulatis, supernè sulco divisis, longitrossum plicatis; areâ superiore tuberculis quadratis albidis, subobliquis instructâ; plicis areæ inferioris latis, albidis, confertis, lineis raris saturatoribus decussatis; anfractu ultimo ad basin rufo; aperturâ parvâ, elongatâ; columellâ anticè productâ.

Among the gracefully subulate, turrited species, this is more particularly distinguished by its closely set, flat, whitish folds, which are crossed by two, rarely three lines, which together with the interspaces of the folds, are of an orange red colour; the base of the last whorl and the aperture are similarly coloured.

Haynan, China: Schroeter. Bow Island; Tahiti, Society Islands; Feejee Islands.

56. *T. STRAMINEA*. (pl. xlii. f. 22, 23.) *Gray*, l. c. p. 62.

Testâ longissimè subulatâ, turritâ, flavescente vel aurantiacâ; anfractibus numerosis, lineâ valdè impressâ divisis, transversim sulcatis; areâ superiore plico-tuberculatâ, undique rugulosâ; aperturâ parvâ; elongatè ovali; columellâ arcuatâ productâ; canali breviusculo, subreflexo.

Shell gracefully lengthened, subulate, turrited, of a clear yellow, verging to orange; whorls numerous, boldly girdled, transversely sulcate; the upper area plico-tuberculate, and everywhere roughened by the lines of growth crossing the



sulci. Aperture small, oval. Columella arched and produced forward. Canal short, reflexed.

Haynan, China; Tranquebar : Schroeter.

57. *T. PRETIOSA*. (pl. xliii. f. 54.) *Reeve*, *Proceed. Zool. Soc.* 1842, p. 200.

Testâ longissimè subulatâ, turritâ, rugosâ, pallidâ, fusco interruptè pictâ; anfractibus numerosissimis, circâ 30, planulatis, valdè excavato-cingulatis, plicis longitudinalibus arcuatis confertim instructis, interstitiis striatis; aperturâ elongatè subquadratâ; columellâ anticè productâ; canali mediocri, reflexo.

Shell elegantly subulate, very lengthened, turrited, of a pale colour, irregularly painted with reddish-brown; whorls very numerous, boldly girdled, closely set with numerous arching folds, the interstices being striate. Aperture small, elongated, squarish. Columella produced forward. A distinct canal.

A single specimen only of this fine species is in the collection of Mr. Cuming, and another is known to exist in the collection of M. Grüner. It is, however, surpassed in the number of its whorls by *T. commaculata*. China.

58. *T. COMMACULATA*. (pl. xlii. f. 37.) *Pfeiffer*. *Buccinum strigilatum*, *Gmelin*, (nec Linnæus). *B. commaculatum*, *Gmelin*, No. 143. *Terebra myuros*, *Lamarck*, l. c. v. vii. p. 289. *T. scabrella*, *Lamarck*, l. c. v. vii. p. 289.

Testâ longissimè subulatâ, turritâ, albidâ, maculis magnis rufis longitudinalibus subquadratis ornatâ; anfractibus numerosissimis, planulatis, supernè cingulatis, lineis transversis minutè tuberculatis scabris; striis incrementi conspicuis; anfractu ultimo parvo, brevi, infernè coarctato; aperturâ subquadratâ; columellâ anticè productâ, contortâ, acutâ canali brevi, reflexo.

Shell very lengthened, subulate, somewhat turrited, white, with large rather square longitudinal dark red spots; whorls flat, very numerous, in the specimen before me 32 in number, and some of the extreme terminal ones are still wanting, girdled, scabrous from the crossing of transverse striæ with the lines of growth; last whorl small, short, and suddenly contracted. Aperture rather square, terminating in a short reflexed canal. Columella produced. The description and figure are from a very elegant specimen in the collection of Mr. Cuming.

New Guinea. Fossil on the shores of the Red Sea: Burton.

59. TRISERIATA. (pl. xlv. f. 119.) *Gray*, l. c. p. 61.

Testâ gracillimè subulatâ, turritâ, pallidè flavâ; anfractibus numerosissimis, circà viginti-novem, planulatis, supernè seriebus duabus tuberculorum rotundorum cinctis, infrâ cancellatis, ultimo quadrato; aperturâ perparvâ, quadratâ; columellâ anticè productâ; canali mediocri.

Of greater length, compared with the diameter, than any other species; and it is very elegantly proportioned. The whorls are furnished above with two series of rounded tubercles, and between which the girdling line passes. Our specimens are of a pale yellow varying to a browner colour.

Island of Ticao, Philippines; six fathoms, sand: Cuming. China Sea; twenty-two fathoms.

The characters presented by this and the two preceding species are aberrant from the more typical *Terebræ*, and present the only safe grounds on which, at present, any sectional division can be attempted. As such, I have for some time regarded it, and also assigned the group the following designation, and as my views as to its value seem fixed, it is here introduced.

## SUBGENUS, MYURELLA.

Testa longissimè subulata; anfractus numerosissimi, supernè cingulo tuberculoso instructi, infernè transversim exculpti, vel rariùs totiùs læves. Apertura perparva, canaliculata. Columella anticè producta.

I do not doubt that several other species might be placed here with advantage, but I refrain from doing so now, as between the two, there appears to be a gap which the specimens before me do not enable me to fill up, and also because these are often not in such a condition as to enable me to decide. Thus, I regard the production of the columella forward as an inner lip as indispensable, but this character in many cases beforeus is not developed, since it is always attendant on mature age.

60. LÆVIGATA. (pl. xlv. f. 93.) *Gray*, l. c. p. 61.

Testâ longissimè subulatâ, acuminatâ, turritâ, concolore; anfractibus numerosis, planulatis, supernè sulco divisus, infernè lineis parvis impressis transversim instructis; areâ superiore lævi, integrâ; aperturâ parvâ, subquadratâ; columellâ contortâ, acutâ; canali mediocri.

*T. funiculata* approaches the present species very closely,

but the impressed line of the upper area, and the groove on the last whorl in that shell, with other features, are sufficient to distinguish them. Here both margins of the girdling line are tumid, and prominent above the general surface. Ceylon.

61. *T. COLUMELLARIS*. (pl. xlv. f. 77,) *Hinds*, l. c. p. 151.

Testâ elongatâ, subcylindrâ, turrito-subulatâ, aurantiacâ, albo nebulosâ; anfractibus subrotundatis, longitrorsum undatim plico-costatis, supernè lineâ impressâ cinctis; interstitiis rufis, striatis; anfractu ultimo breviusculo, rotundato, albo fasciato. Aperturâ effusâ; columellâ nudâ.

Remarkable from its great similarity to *T. undulata*, which is itself a peculiar species. The grounds of distinction are its decidedly cylindrical shape, different distribution of the colour, and its short, abrupt, rounded and banded last whorl. At plate xlv. fig. 127, is represented a white variety, but which has in all probability lost its colour.

Native country unknown.

62. *T. UNDULATA*. (pl. xliii. f. 55.) *Gray*, l. c. p. 60. *T. pertusa*, *Kiener*, *Iconographie*, var. t. 11. f. 24, c.

Testâ attenuatè subovali subulatâ, acuminatâ, turritâ, nitidâ, aurantiacâ; anfractibus planulatis, supernè lineâ impressâ divis, longitrorsum plicatis; plicis obtusis, confertis, obliquis, suprâ cingulum nodulos, albidis, interstitiis striatis; anfractu ultimo attenuato, concolore; aperturâ utrinque attenuatâ, aurantiacâ; columellâ nudâ, rectiusculâ.

The inferior whorls are slightly swelled, which separates it at once from many species, all of which may be regarded as very lengthened cones; the folds are rigidly oblique, and the intervals rather closely striate; the upper nodulous range is white, but everywhere else it is of a clear orange. The last whorl and aperture are unusually attenuate. M. Kiener has considered it as a variety of *T. pertusa*, which is truly a very different shell. Bow Island; New Guinea; Straits of Malacca.

63. *T. AFFINIS*. (pl. xlv. f. 78.) *Gray*, l. c. p. 60. *T. striata*, *Quoy*, *Voy. de l'Astrolabe*, p. 468. t. 36. f. 23, 24.

Testâ elongatè subulatâ, turritâ, politâ, albâ, rufo subseriatim pictâ; anfractibus sulco divis, longitrorsum plicatis; plicis magnis, planis, latis, interstitiis angustis, striatis; anfractu ultimo attenuato, transversim rufo-fusco lineato; aperturâ effusâ; columellâ rectiusculâ, contortâ.

The individuals vary much; generally they are small and dwarf, and it is then the shell described by Mr. Gray; sometimes they are large and fine grown, in which case it is the shell of M. Quoy. Mr Gray observes that it is allied to *T. nubeculata*, but smaller and of more slender proportions. The shell

which at present bears this name in the British Museum, is *T. nebulosa*, and this most probably Mr. Gray means. On the authority of Mr. Sowerby, the author of both these species, *T. nubeculata* is not to be identified. The name of M. Quoy has priority, but happens to be previously occupied in a fossil species. Feejee Islands; Seychelles.

64. *T. VARIEGATA*. (pl. xliii. f. 53.) *Gray*, l. c. p. 61. *T. africana*, *Gray*, Griffiths, ed. Cuvier, t. 23, f. 5.

Testâ conico-subulatâ, turritâ, albâ vel cinereâ, maculis longitudinalibus atro-rufis ornatâ; anfractibus planulatis, supernè sulco impresso divis; areâ superiore tuberculato-plicatâ, interruptè fusco pictâ, inferiore sulcis tribus cinctâ; anfractu ultimo albo fasciato; aperturâ subquadratâ; columellâ nudâ, contortâ; canali brevi.

Shell conical subulate, turrit, white varying to ash; whorls flat, girdled, the superior area with tubercular folds, interruptedly painted with dark red spots, the lower area polished with the regular grooves, ornamented with longitudinal spots; last whorl banded. Aperture rather square; columella naked, twisted. A short canal.

Guayamas, Gulf of California; in ten to twelve fathoms, sandy mud: Cuming.

65. *T. INTERTINCTA*. (pl. xliv. f. 81.) *Hinds*, l. c. p. 155.

Testâ conico-subulatâ, acuminatâ, turritâ, pallidâ vel cærulescente; anfractibus planulatis, politis, duabus vel tribus lineis transversis, supernè cingulo tuberculato, infernè obsoletè tuberculo-plicatis, interstitiis tuberculorum fusco maculatis; anfractu ultimo subrotundato, uniseriatim tuberculato, interstitiis nebulosis; aperturâ ovali; columellâ nudâ, contortâ.

The whorls are surmounted by a row of tubercles, with small brown spots in the intervals; beneath the area is polished, with some obsolete folds, which, descending to the suture, gradually develope, and terminate in a small tubercle; and, tracing them round the whorls till the lip ceases, they continue over the middle of the last whorl as a row of small tubercles. Gambia; among sandy mud.

66. *T. ARMILLATA*. (pl. xliii. f. 49.) *Hinds*, l. c. p. 154.

Testâ turrito-subulatâ, acuminatâ, fuscâ; anfractibus planulatis, longitrorum subdistanter plico-costatis, transversim lineis definitis impressis, supernè cingulo noduloso, ætate valdè notabili; anfractu ultimo subquadrato, ad basin albo fasciato; aperturâ atro-fuscâ; columellâ contortâ.

Shell subulate, turrit, acuminate, brown varying to ash colour; whorls flat, rather distantly plicate, with transverse



impressed lines, above with a coarse nodulous girdle; last whorl squarish, banded. Aperture brown within, square. Columella twisted, covered with a very thin callus.

Abundant in various localities on the west coast of America, between Panama and the Bay of Magdalena in Lower California, in from five to thirteen fathoms; also at the Galapagos, in ten fathoms, chiefly in sandy situations. It was also found imbedded in the fossiliferous cliffs which surround a portion of the Bay of Magdalena.

67. *T. ASPERA.* (pl. xliii. f. 44.) *Hinds*, l. c. p. 154.

Testâ turrito-subulatâ, acuminatâ, pallidâ, aurantiacâ vel fuscâ; anfractibus subrotundatis, longitrorsum subconfertè plico-costatis, nodulosis, liris transversis decussantibus, supernè cingulo plico-nodulifero sparsim fusco maculato; anfractu ultimo rotundato, ad basin albo fasciato; aperturâ colorem testæ simulante; columellâ contortâ.

Shell subulate, turrited, acuminate, fluctuating from pale to orange or dark brown; whorls somewhat rounded, with numerous closely-set longitudinal folds, these being crossed by transverse grooves, originate numerous small prominent tubercular interspaces; the upper area is usually pale with distant reddish-brown spots; last whorl rounded, banded with white. Aperture oblong. Columella twisted. Canal short.

Panama, Monte Christi, St. Elena, west coast of America; in from six to ten fathoms, sandy mud: Cuming.

68. *T. RADULA.* (pl. xliv. f. 95.) *Hinds*, l. c. p. 155.

Testâ turrito-subulatâ, fulvâ, nitidâ; anfractibus rotundatis, plicis tuberculatis longitudinalibus et transversis cancellatis, propè suturam serie tuberculorum majusculorum; anfractu ultimo ad basin albo angustè fasciato; aperturâ oblongâ, concolore; columellâ contortâ, acutâ.

The whorls are rounded and cancellated, with small tubercular elevations at the angles. The series of tubercles above the girdling is somewhat paler, and the last whorl has a narrow band. The shell is unique, in Mr. Cuming's collection.

Puerto Portrero, west coast of America; in thirteen fathoms, coral sand: Cuming.

69. *T. BIFRONS.* (pl. xliii. f. 57.) *Hinds*, l. c. p. 155.

Testâ turrito-subulatâ, lævigatâ, fuscâ; anfractibus rotundatis, inferioribus multiseriatim tuberculatis, superioribus longitrorsum biseriatim tuberculo-plicatis; tuberculis parvis approximatis, interstitiis lævibus; aperturâ oblongâ; columellâ rectiusculâ, subtruncatâ.

Shell subulate, turrited, smooth, of a dirty brown; whorls somewhat rounded, entire, the penultimate and antepenultimate with about four series of small tubercles, the remaining superior whorls with two series of longitudinal folds, their extremities separated by a narrow smooth interval. Aperture oblong, effuse. Columella naked, short, and truncate. No canal. Japan : Dr. E. Siebold.

70. *T. GLAUCA*. (pl. xlv. f. 85.) *Hinds*, l. c. p. 155.

Testâ turrito-subulatâ, acuminatâ, glaucescente; anfractibus rotundatis, eleganter cancellatis, propè suturam cingulo albido tuberculato; anfractu ultimo elongato, pallidè fasciato; aperturâ ovali; columellâ contortâ.

Probably only the young of *T. radula*, notwithstanding the rather different character of the cancellation, and its glaucous appearance. Native country unknown.

71. *T. BICINCTA*. (pl. xlv. f. 72.) *Hinds*, l. c. p. 150.

Testâ subulatâ, lævigatâ, nitidâ; anfractibus rotundatis, lineâ impressâ divisâ, longitrosum plicatis, supernè areâ coarctatâ, transversim biseriatim super plicas minutè tuberculatis; plicis tenuibus, acutis, interstitiis lævigatis; anfractu ultimo concolore.

Remarkably and very distinctly characterized by the two rows of small tubercles which encircle the whorls beneath the girdling. The shell is otherwise of an uniform white glassy colour, which might be attributable to its condition. Our skilful artist seems to have seen an additional series of tubercles; but except on the last whorl where there are three, I cannot discover more than two. The specimen is unique in the collection of Mr. Cuming. Native country unknown.

72. *T. TUBERCULOSA*. (pl. xliii. f. 48.) *Hinds*, l. c. p. 154.

Testâ turrito-subulatâ, acuminatâ, politâ, olivaceâ; anfractibus planulatis, lævigatis, politis, supernè cingulo tuberculato, areâ inferiore triseriatim tuberculato; seriebus duabus superioribus frequenter subevanidis; anfractu ultimo subquadrato, unicolore, multiseriatim tuberculato; columellâ contortâ.

Shell subulate, acuminate, turrited, polished, pale olive; whorls flat, shining, above with a nodulous girdle, beneath with about three series of small regularly disposed tubercles, those in the middle being less distinct; last whorl rather square, not banded. Aperture oblong. Columella naked, twisted.

This is a very distinct tubercled species from the collection of Sir Edward Belcher.

Panama; Gulf of Papagayo; San Blas; in from four to eleven fathoms.

73. *T. LARVÆFORMIS*. (pl. xliii. f. 46, 47.) *Hinds*, l. c. p. 155.

Testâ subcylindræâ, turrito-subulatâ, fuscâ, nitidâ; anfractibus brevibus rotundatis, longitrorsum plico-costatis, supernè lineâ impressâ contractatis; costis rotundatis vel varicosis, interstitiis læviter striatis; anfractu ultimo breviusculo, pallidè fasciato; aperturâ pallidâ.

Shell somewhat cylindrical, subulate, turrited, shining, of a rich brown; whorls narrow, rounded, with longitudinal rounded folds, girdled above, the interstices feebly striated; last whorl short, with a pale banding. Aperture small and contracted. Columella short, twisted.

I have examined a number of specimens of this shell, all of which I refer to this species, and find them vary much in the general and relative proportion of their outline and width of whorls.

St. Elena and Monte Christi, west coast of America; in from six to fifteen fathoms, sandy mud.

74. *T. FENESTRATA*. (pl. xlv. f. 86.) *Hinds*, l. c. p. 153.

Testâ elongatè conico-subulatâ, pallidè fulvâ; anfractibus planulatis, supernè cingulo nodulifero, infrâ secundo minore, internè cancellatis; apice subpapillari; anfractu ultimo quadrato ad basin abruptè contractato; aperturâ parvâ; labio interno subcalloso, producto.

The superior series of tubercles is large and prominent, and just beneath is accompanied by a second of smaller size, the remainder of the whorl is cancellated by the crossing of the two or three salient lines. The shell is of a uniform pale dirty yellow colour.

75. *T. PICTA*. (pl. xlv. f. 105.) *Hinds*, l. c. p. 156.

Testâ subcylindræâ, turrito-subulatâ, nitidâ, pallidè auran-tiacâ, atro-fusco longitrorsum maculatâ vel nebulosâ; anfractibus rotundatis, supernè cingulo tuberculato, infrâ plico-costatis, interstitiis striatis; anfractu ultimo fasciato; aperturâ parvâ, atro-fuscâ; columellâ subrectâ.

Highly polished, with a pale brown ground, ornamented with longitudinal dark reddish-brown spots. The folds are short, and crowded with striated interstices. Aperture is small, but not quite formed; last whorl band with white.

San Nicholas, Island of Zebu, Philippines.

76. *T. VIOLASCENS.* (pl. xlv. f. 98.) *Hinds*, l. c. p. 154.

Testâ turritâ, cylindraceo-subulatâ, violaceâ; anfractibus rotundatis, longitrorsum obliquè plico-costatis, supernè lineâ impressâ obsoletè cinctis; costis subconfertis, interstitiis crebrè striatis; aperturâ parvâ, elongatâ; columellâ anticè productâ.

The folds are oblique to the right hand of the spectator, and with the interstices closely striate. It is destitute of the polish of *T. picta*, its whorls are rounder, and without the dark spots.

New Guinea; in seven fathoms, mud. San Nicholas, Zebu, and Mindanao, Philippines; in twenty to thirty fathoms: Cuming.

The Philippine specimens are of a different colour, and disposed to be banded, but they have the appearance of dead shells. The species is very like an American fossil from Alabama, *T. venusta*, Lea.

77. *T. FLAVA.* (pl. xlv. f. 75.) *Gray*, l. c. p. 60.

Testâ obeso-subulatâ, supernè attenuatâ, subturritâ, pallidè flavâ, anfractibus planulatis, supernè lineâ impressâ divisis, longitrorsum plicatis, striis transversis cancellatis; plicis subrectis, confertis; aperturâ abbreviatâ; columellâ nudâ, contortâ.

Shell not uniformly subulate, the superior whorls being proportionately more so than the others; this with the flattened cancellated whorls and uniform pale yellow colour will readily distinguish it. Native country unknown.

78. *T. ELATA.* (pl. xlv. f. 68, 69.) *Hinds*, l. c. p. 156.

Testâ subcylindraceâ, elongatè turrito-subulatâ, pallidè fulvâ; anfractibus ferè planulatis, longitrorsum plicatis, supernè lineâ impressâ cinctis; plicis approximatis, interstitiis striatis; anfractu ultimo ad basin et propè suturam fusco; aperturâ elongatâ.

Gracefully elongated, glittering, the folds sharp, straight, and rather numerous, with the interstices finely striate. The base of the last whorl is of a brown colour; and some individuals are ornamented with longitudinal spots of a reddish-brown.

Bay of Montijo, west coast of America; in fifteen fathoms, coarse sand: Cuming.

79. *T. TEXTILIS.* (pl. xlv. f. 73.) *Hinds*, l. c. p. 156.

Testâ subulatâ, pallidè luteâ; anfractibus ferè planulatis longitrorsum plicatis, supernè lineâ punctato-impressâ cinctis,



serie tuberculorum deindè excisâ albidâ ; plicis approximatis, interstitiis striatis ; anfractu ultimo parvo, unicolore ; columellâ plicatâ ; labio interno producto.

This Asiatic species very closely resembles the American just described, and furnishes another of those instances of affinity, which, whilst still retaining unquestionable distinctness, occur so frequently in the shells of the tropics of the two hemispheres ; and thus, whilst both are enriched by similar forms, these present themselves under slight but constant differences. It also bears considerable resemblance to *T. flava*, but the characters are quite sufficient to recognize each.

Sorgoson, Bay of Manila, Philippines ; Straits of Macassar ; in from six to thirteen fathoms, sand and coarse gravel : Cuming and Hinds.

80. *T. CANCELLATA*. (pl. xlv. f. 80.) Quoy, Voy. de l'Astrolabe, p. 471, t. 36, f. 27, 28.

Testâ subulatâ, acuminatâ, fuscâ, concolore ; aufractibus planulatis, supernè lineâ excavato-impressâ divisâ, plicatis ; plicis numerosis, acutis, subobliquis, interstitiis striatis ; aperturâ utrinque attenuatâ, atro-fuscâ ; columellâ antice productâ ; breviter canaliculatâ.

The characters here are so negative, that it is not easy to seize on any circumstance which language can express to establish its distinctness, whilst this to the eye is unquestionable. Its uniform colour must not be overlooked, or the absence of banding on the last whorl. The aperture is of a dark brown, and a ridge of similar colour runs from the columella around the base of the last whorl. This species has priority of *T. cancellata*, Gray, which unfortunately is only known to us from description.

Moluccas : Quoy and Gaimard.

81. *T. PULCHRA*. (pl. xlv. f. 129.) Hinds, l. c. p. 151.

Testâ turritâ, conico-subulatâ, acuminatâ, nitidâ, pallidâ ; anfractibus subplanulatis, longitrorsum rectè plico-costatis, supernè lineâ impressâ cinctis, interstitiis lævigatis ; anfractu ultimo pallidè lineato.

Perhaps more nearly resembling *T. plicata* than any other species, from which, with a little care, the description will suffice to distinguish it.

Marquesas ; in seven fathoms.

82. *T. LANCEATA*. (pl. xliii. f. 52.) Lamarck, l. c. v. vii. p. 290. *Buccinum lanceatum*, Gmelin, No. 137.

Testâ elongatè ovato-subulatâ, albâ, politâ, strigis rufis

angustis, rariùs flexuosis seu interruptis, longitrorsum penicillatâ; anfractibus subrotundatis, integris, lævigatis, ultimo attenuato; aperturâ utrinque attenuatâ; columellâ nudâ, rectiusculâ; canali nullo.

Shell elongated, ovately subulate, white, with longitudinal narrow red lines, more or less straight, rarely angular or flexuous; whorls quite entire, smooth and polished. Aperture attenuate. Columella naked, straight. No canal.

Tahiti; Mauritius: Cuming. Amboina.

83. *T. PENICILLATA*. (pl. xlv. f. 91.) *Hinds*, l. c. p. 157.

Testâ turritâ, obeso-subulatâ, lævigatâ, politâ, albâ lineis undatis rufis longitrorsum dispositis; anfractibus integris, ultimo elongato, efasciato; spirâ obsoletè plicatâ; aperturâ elongatâ; columellâ lævi, truncatâ; canali nullo.

Shell turrited, subulate, the inferior whorls somewhat swelled, with a smooth polished bone-white surface, ornamented longitudinally with wavy reddish lines. Whorls entire, the last similar to the others. Spire inconspicuously plicate. Aperture rather attenuate, and with a smooth naked columella.

Seychelles.

84. *T. VENOSA*. (pl. xlv. f. 90.) *Hinds*, l. c. p. 157.

Testâ subcylindræo-subulatâ, lævigatâ, politâ; anfractibus integris, subplanulatis, supernè albo, infrâ purpureo cinctis, strigis rufis longitudinalibus flexuosis; spirâ plicatâ; anfractu ultimo subrotundato, rariùs transversim fasciato vel lineato; aperturâ elongatâ, albâ; columellâ nudâ, rectiusculâ, truncatâ; canali nullo.

This is, perhaps, the only species in this now extensive genus where the fasciation of the last whorl is not to be relied on as a character. Both the preceding have been united by M. Kiener with *T. lanceata*, but I cannot help regarding them as most unquestionably distinct. The inferior part of each whorl is usually of a darker colour, and sometimes even to be almost banded.

Native country unknown.

85. *T. INCONSTANS*. (pl. xlv. f. 83.) *Hinds*, l. c. p. 156.

Testâ obeso-subulatâ, acuminatâ, lividâ vel pallidâ, politâ; anfractibus integris, subrotundatis, longitrorsum plicatis, interstitiis lævigatis; infrâ suturam et ad basin anfractûs ultimi pallidè fasciatâ; aperturâ effusâ; columellâ truncatâ, anticè productâ.

This species has much of the general character of *T. anomala*, but the whorls are constantly entire, and the shells are

more acuminate and obese. Pale markings are sometimes present in the interstices of the delicate sharp folds.

Sandwich Islands, where it abounds in the sands in considerable numbers.

86. *T. ANOMALA*. (pl. xlv. f. 97.) *Gray*, l. c. p. 62.

Testâ conico-subulatâ, acuminatâ, turritâ, lævigatâ, politâ, pallidâ vel cinereâ; anfractibus planulatis, supernè sulco excavato-impresso divisis, longitrorsum plicatis; plicis acutis, politis, infernè evanidis, interstitiis lævigatis; aperturâ ovali, effusâ; columellâ truncatâ, anticè productâ; canali nullo.

The whorls are girdled and polished, with numerous folds disappearing below. The girdling line is accompanied by small excavations in the intervals. Near the whorl it is disposed to be whiter, and the last whorl is banded.

Singapore; in seven fathoms: Cuming.

87. *T. CINEREA*. (pl. xlv. f. 130.) *Basterot*. *Buccinum cinereum*, *Born*, Mus. p. 267. t. 10, f. 10, 12. *Terebra aciculina*, *Lamarck*, l. c. v. vii. p. 290.

Testâ conico-subulatâ, acuminatâ, politâ, nitidâ, cinereâ vel saturatè fuscâ; anfractibus subplanulatis, integris, tenuè plicatis, infrâ suturam albidis, inter plicas rufo pictis, ultimo albo fasciato; aperturâ valdè diffusâ; columellâ anticè productâ, rectiusculâ, truncatâ; canali nullo.

The present is an old and abundant species, and like some others seems to have been originally brought into notice by Born, to be subsequently forgotten. There are several other species of very similar character, and it is remarkable that the girdling seems a very unimportant feature among them, since some species are without it, whilst others near akin are provided with it.

Manila; on the sand: Cuming. Fossil at Bordeaux: Basterot.

88. *T. STRIGILATA*. (pl. xlv. f. 101, 122.) *Lamarck*, l. c. v. vii. p. 290. *Buccinum strigilatum*, *Linnaeus* Syst. Nat. No. 484.

Testâ subulatâ, acuminatâ, subturritâ, cinereâ, politâ; anfractibus integris, plicatis, supernè albo fasciatis et maculis rufis seriatim ornatis; plicis confertis, obliquis, planulatis, rotundatis; anfractu ultimo fasciato: aperturâ ovali; columellâ nudâ, subrectâ; canali nullo.

Generally of an ash colour fluctuating from pale to dark, above with a white band which is ocellate with dark red spots. The individuals vary a good deal in size, and fig. 122, may be regarded as representing rather a large specimen, since the

average are smaller. Fig. 101, is an excessively pretty variety of a rich cream colour, but still with the white band, and series of spottings.

New Guinea; Straits of Macassar: Hinds. Philippine Islands: Cuming. It is a species which is produced in considerable numbers.

89. *T. LUCTUOSA*. (pl. xlv. f. 121.) *Hinds*, l. c. p. 157.

Testâ gracilè acuminatâ, lævigatâ, politâ, atro-fuscâ, rariùs castaneâ vel olivaceâ; anfractibus subplanulatis, integris, supernè plicis parvis undatis, infrâ evanidis, ultimo elongato, concolore; columellâ nudâ, truncatâ; canali nullo.

Shell gracefully acuminate, highly polished, of a dark chestnut, sometimes nearly black; whorls entire, covered towards their upper part with numerous fine folds. The aperture very dark within, effuse. Columella straight, naked, and truncate. No canal.

Gulf of Nicoya; Puerto Portrero, west coast of America; in twelve fathoms, coral sand: Cuming and Hinds.

90. *T. CUSPIDATA*. (pl. xlv. f. 28.) *Hinds*, l. c. p. 157.

Testâ gracilè et elongatè subulatâ, valdè acuminatâ, lævigatâ, politâ, nitidâ; anfractibus planulatis, integris, supernè plicatis, infrâ evanidis, pallidis cæruleo angustè fasciatis; anfractu ultimo lævigato, subdiaphano, ad basin fasciâ rufâ ornato; aperturâ ovali; columellâ nudâ, excavatâ, truncatâ.

Very acuminate, highly polished, and semi-opaque; whorls entire, but in the usual situation of the girdle, with a narrow ash-brown band; their upper half with longitudinal folds. The last whorl with a white base traversed by a well-defined reddish band.

Cape Coast, Africa: Humphreys.

91. *T. MICANS*. (pl. xlv. f. 125.) *Hinds*, l. c. p. 157.

Testâ conico-subulatâ, acuminatâ, semiopacâ, pallidè fulvâ, nitidâ; anfractibus planulatis, integris, longitrorsum plicis capillaribus, supernè cæruleo et ad basin anfractûs ultimi fusco fasciatis; aperturâ infernè effusâ; columella nudâ, truncatâ.

Shell conico-subulate, acuminate, of a shining amber colour; whorls entire, polished, clothed with numerous very fine capillary folds, somewhat disappearing towards the lower part of the whorl; variously coloured with reddish-black, generally with a narrow band near the suture, and with the inferior whorls more coloured than the upper.

Native country unknown.



92. *T. LEPIDA*. (pl. xlv. f. 102.) *Hinds*, l. c. p. 158.

Testâ obeso-vel rariùs subcylindraceo-subulatâ, acuminatâ, lævigatâ, politâ, albidâ vel pallidè fulvâ; anfractibus planulatis, integris, plicis longitudinalibus acutis, interstitiis lævigatis, supernè maculis rufis cinctis; anfractu ultimo subcylindraceo, pallidè fasciato; aperturâ elongatâ; columellâ nudâ.

Of a pale orange colour, the whorls entire, longitudinally plicate, and highly polished. The folds are distant, rather oblique, sharp, and of a whiter colour. Beneath the suture is a series of red spots, one being situated in nearly every alternate interstice. It differs from *T. strigilatâ*, in that the spots of that species are painted on a white band, and again that the folds are broad and rounded and touch each other.

Guinea; on the sands: Humphreys.

93. *T. ALBULA*. (pl. xlv. f. 126.) *Menke*, Moll. Nov. Holland, p. 30.

Testâ subobeso-subulatâ, acuminatâ, turritâ, lævigatâ, politâ, albâ; anfractibus planulatis, integris, supernè crenatoplicatis, mediò et infernè lævibus, ultimo elongato; aperturâ attenuatâ, effusâ; columellâ rectâ, nudâ, truncatâ; canali nullo.

As I am guided alone by description, there may be some doubt whether I have referred the right shell to it; however, it entirely agrees in this respect, and its characters are few and negative. The folds occupy about a third, or something less, of the breadth of the whorl.

West Coast of New Holland: Menke.

94. *T. OBESA*. (pl. xlv. f. 106.) *Hinds*, l. c. p. 158.

Testâ obeso-subulatâ, lævigatâ, albidâ, maculis fuscis longitudinalibus pallidè ornatâ; anfractibus paucis subrotundatis, integris, ultimo biseriatim maculato; spirâ obsoletè plicatâ; aperturâ oblongâ; columellâ truncatâ.

Polished and white, with a single series of pale spots; whorls entire, the inferior obese and smooth, the superior longitudinally plicate. Aperture oblong; columella slightly callous, truncate. No canal. I am only conversant with a single specimen, in the collection of Mr. Cuming, of this small but very distinct species.

Native country unknown.

95. *T. NASSOIDES*. (pl. xlv. f. 115.) *Hinds*, l. c. p. 158.

Testâ obeso-subulatâ, lævigatâ, nitidâ; anfractibus planulatis, integris, supernè albo, mediò fusco cinctis, ultimo con-

colore; aperturâ infernè effusâ; columellâ nudâ, rectiusculâ, subtruncatâ; canali nullo.

Whorls entire, polished, with longitudinal straight folds; beneath the suture banded with white, towards the middle with a dark narrow band, elsewhere of an ash colour.

Native country unknown.

96. *T. FICTILIS*. (pl. xlv. f. 109, 110.)

Testâ obeso-subulatâ, acuminatâ, turritâ, lævigatâ, nitidâ, albâ; anfractibus planulatis, lineâ impressâ divisis, plicatis; plicis acutis, brevibus, interstitiis lævigatis; propè suturam et ad basin anfractûs ultimi nigricante; apice fuscâ; aperturâ effusâ; columellâ nudâ, subcontortâ; canali nullo.

Very similar to *T. nassoides*, from which it is at once separable by its girdled whorls.

Australia; most probably from somewhere on its southern shores.

97. *T. TUBEROSA*. (pl. xlv. f. 99.) *Hinds*, l. c. p. 152.

Testâ turrito-subulatâ, saturatè fulvâ, asperâ, nitidâ; anfractibus rotundatis, longitrorsum costatis, supernè cingulo numerosè tuberculato; costis brevibus, nodulosis striis decussantibus; columellâ contortâ.

In this characteristic species the girdle consists of a number of small tubercles, superior in number to the vertical ribs.

98. *T. RUSTICA*. (pl. xlv. f. 113.) *Hinds*, l. c. p. 158.

Testâ obeso-subulatâ, acuminatâ, fuscâ, nitidâ, striis transversis scabrâ; anfractibus subrotundatis, longitrorsum plicocostatis, supernè infrâ suturam luteis; plicis subdistantibus, ferè continuis; anfractu ultimo elongato, concolore; aperturâ elongatâ; columellâ nudâ, lævi, subrectâ.

An acuminate, retuse species, with distant straight rounded folds, and scabrous from crossing striæ. The aperture and last whorl are both elongated, and the latter displays no band. The colour is of a rusty red. The figure represents a fine specimen in the collection of Wm. Metcalfe, Esq.

Native country unknown.

99. *T. ACICULATA*. (pl. xlv. f. 104.) *Gray*, l. c. p. 63. *Buccinum aciculatum*, *Lamarck*, l. c. v. vii. p. 274.

Testâ ovatâ, acuminatâ, pallidâ, politâ; anfractibus tuberculato-plicatis, mediò subangulatis et atro-fusco fasciatis, interdum, precipue anfractu ultimo, lineis rufis angulatis ornatis; aperturâ attenuatâ, subeffusâ; columellâ nudâ, elongatâ.

From the next species this will be distinguished by the angular disposition of the whorls, and the tubercular folds which attenuate towards the sutures. The last whorl occupies nearly half of the entire length.

Acapulco; Sonsonati; Xipixapi: Cuming.

100. T. COSENTINI. (pl. xlv. f. 107.) *Philippi*, Enum. Moll. Sicil. p. 227, t. 11. t. 22.

Testâ elongatè ovatâ, acuminatâ, turritâ, cinereâ, politâ; anfractibus integris, supernè tuberculis acutis uniseriatim coronatis, nigricante pictis, ultimo propè basin fasciato; aperturâ utrinque attenuatâ; columellâ nudâ, rectâ; canali brevi vel subnullo.

Shell ovate, acuminate, polished, the whorls crenated by a row of sharp tubercles, and between them and the suture is a much smaller series, not at first very conspicuous. The character of the shell is rather aberrant, and may be regarded as significant of its extra-tropical habitat.

Naples: Philippi.

101. T. TENERA. (pl. xlv. f. 111.) *Hinds*, l. c. p. 158.

Testâ parvâ, obeso-subulatâ, lævigatâ, nitidâ; anfractibus plico-costatis, pallidè fulvis, supernè prope suturam rufo fasciatis, ultimo ad basin rufo; plicis continuis; columellâ contortâ.

A highly polished pale orange yellow shell, remarkable for the folds being continuous at their extremities throughout the length. Beneath the suture it is surrounded by a reddish band.

Straits of Malacca; in seventeen fathoms. Ceylon.

102. T. MERA. (pl. xlv. f. 108, 114.) *Hinds*, l. c. p. 158.

Testâ subcylindræo-subulatâ, lævigatâ, nitidâ, albidâ, vel pallidè rufo latè fasciatâ; anfractibus subplanulatis, integris, supernè plicis parvis numerosis obliquis, infrâ evanidis; aperturâ parvâ, elongatâ; columellâ subtruncatâ; canali mediocri.

Its milk-white surface is lightly ornamented with a broad band of dull rose colour. The folds are numerous and oblique, the shell is highly polished.

Straits of Malacca; in seventeen fathoms, mud.

103. T. PYGMÆA. (pl. xlv. f. 112.) *Hinds*, l. c. p. 158.

Testâ purpureâ, obeso-subulatâ; anfractibus paucis, subrotundatis, longitrorsum minutè plico-costatis, supernè insigniter fasciâ angustâ atro-purpureâ cinctis, ultimo propè basin fasciato; aperturâ parvâ, fuscâ; columellâ anticè productâ, truncatâ; canali nullo.

A pretty little elongated ovate shell, with plicate whorls, and a narrow dark band traversing the upper portion of each, and thus running in a spiral manner round the shell. The figure represents an enlarged view. The only specimen of which I am cognizant, is in the collection of Sir Edward Belcher, C.B.

Straits of Malacca ; in seventeen fathoms, mud.

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104. *T. ALBA*, *Gray*, l. c. p. 60.

"Testâ turrîtâ, subulatâ, costis longitudinalibus spirali-busque frequentibus cancellatâ; anfractibus planis, cingulo convexiusculo; aperturâ parvâ; albâ."

This species I have seen, but at the present moment it is unfortunately mislaid. Its length is three-quarters of an inch.

Native country unknown.

105. *T. CANCELLATA*, *Gray*, l. c. p. 62.

"Testâ turrîtâ, subulatâ, sulcis spiralibus frequentibus profundis, plicis longitudinalibus æqualibus subconfertis; anfractibus planis, sulco posteriore profundo; aperturâ subparvâ, labio interiore incrassato elevato; pallidè cinereâ."

This I have never seen, and I believe the original specimen to be lost. Its length is one inch and three-quarters. The name has been previously applied *M. Quoy*.

Native country unknown.

106. *T. NUBECULATA*, *Sowerby*, *Tank. cat. app.* p. 25.

"Testâ turrîto-subulatâ, albo et aurantiaco-nebulosâ, anfractibus longitudinaliter sulcatis, sulcis confertis, interstitiis sulcorum crenulatis, lineâ propè suturam punctis impressis notatâ; basi aurantiacâ."

Even with the aid of *Mr. Sowerby*, this species is not now to be identified. The length is nearly two inches and a half.

Native country unknown.

107. *T. LÆVIS*, *Gray*, l. c. p. 61.

After repeated examinations of the very miserable specimen which has been described under this name, I feel satisfied that it is only the worn apex of either *T. muscaria*, or *T. oculata*, which in an early state are much alike.

108. *T. ———* *D'Orbigny*, *Description de l'Egypte*, *Mollusques*, pl. 4. fig. 28.

At the above reference will be found a highly magnified representation of a minute shell, which is stated to be a *Terebra*, but is unaccompanied by any comment or further



explanation. The materials only enable us thus briefly to notice it here.

109. *T. SANDWIZENSIS*,———?

Of this I can obtain no information, except that it occurs in a French catalogue.

#### EXCLUDENDÆ.

*T. VITTATA*, *Lamarck*, *Encyclop.* pl. 402, f. 4, a. b.

*T. GRANULOSA*, *Lamarck*, *Hist. des Animaux.* v. vii. p. 291.

*T. LINEOLATA*, *Sowerby*, l. c. p. 76.

*T. TAHITENSIS*, *Gray*, l. c. p. 63.

*T. POLITA*, *Gray*, l. c. p. 63.

The synonymy of these, together with a list of the fossil species, will be found in my *Synopsis of the Genus* contained in the *Proceedings of the Zoological Society for 1843*, p. 166—168.

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## MONOGRAPH OF THE GENUS

## VOLUTA.

*Char. Gen.* Testa subovata, coloribus plerumque variis picta. Apex papillaris. Columella plicata, plicis inferioribus majoribus, basi emarginata. Epidermis tenuis.

Shell of a more or less elongated oval form, and for the most part variously coloured. Apex of the spire papillary, sometimes very obtuse and somewhat irregular, though generally beautifully regular; rarely somewhat acute. Columella plaited, the lowest plaits being in general the largest and the most oblique.

The Genus *Voluta* as it was left by Lamarek, (including *Cymba* and *Melo*), appears to us to form a very natural family; which might perhaps be further divided into genera and subgenera advantageously for the interests of science. What we now give are the *Volutes* as separated from *Cymba* and *Melo* by Broderip, whose opinions upon this subject we gladly adopt, he having studied this family most completely.

The various species of this beautiful genus differ greatly in form, and these differences, together with other characters, may either be used as the foundations of *divisions* in the genus or as subgeneric characters. Those with a large, regular, and smooth apex might properly constitute one division; some of these, as *V. imperialis*, have the spire crowned with long and strong spines; others, as *V. Scapha*, are quite free from such spines, or have the last volution only tuberculated posteriorly. A second division might be constituted of such as *V. Vespertilio*, *V. rutila* and others, in which the apex of the spire is surrounded by small tubercles. A third division might consist of such as have a small, rather acute, smooth apex, such as *V. marmorata*, *Swains.*, *V. Cymbiola*, *Chemn.*, which approach the *Melones*; such as *V. Vexillum* and *V. indica*, which, having an increased number of folds on the Columella, approach the *Musics*, which have a still greater number of folds on the Columella. Then the *Volutes*, with a truncato-papillary apex, which is somewhat irregular, and which approach the *Cymbæ* (through

V. Mamilla, *Gray*), such as V. papillosa, V. fulminata and others, might constitute a fourth division. The Mitriform species, such as V. lyriformis, V. mitriformis and others, would naturally form a fifth division. Several species would still remain, which could not be arranged with any of the above, these are V. bullata, *Swains.*, V. dubia, *Brod.*, which are anomalous and probably osculent forms.

The Volutes are marine and appear to belong to the more temperate and warmer zones. Many fossil species are known, principally belonging to the tertiary beds.

## DESCRIPTION.

### 1. VOLUTA MARMORATA (pl. xlv. f. 8.), *Swains.*

Testâ ovatâ, suboblongâ, ventricosâ, lævi, fulvo-carneolatâ, maculis lineisque castaneis, irregularibus, angulato-flexuosis, fasciatim dispositis, pictâ; spirâ brevi, apice conico, anfractibus tribus ad quatuor primis lævibus, cæteris duobus ad tribus posticè subangularibus, seriem unicam spinarum obtusarum parvarum instructis; anfractu ultimo maximo, anticè attenuato, aperturâ maximâ  $\frac{5}{8}$  longitudinis testæ æquante, oblongo, latiusculo, intus fulvescente, anticè saturatori; labio externo subincrassato, subreflexo; plicis columellæ quatuor, validis, fulvis.

Shell ovate, sub-oblong, ventricose, smooth, of a yellowish flesh colour, with irregular spots, and angularly flexuous chesnut lines, arranged in bands; spire short, with a conical apex; volutions 3-4, the first smooth, and the remaining two or three slightly angular posteriorly, with a single row of obtuse small spines, the last volution very large, attenuated anteriorly; aperture very large,  $\frac{5}{8}$  of the length of the shell, oblong, rather broad, fulvous within, which is darker at the anterior end; outer lip somewhat thickened and reflected; folds of the columella four, distinct, fulvous.

This is an Australian form, we have represented Miss Saul's specimen.

### 2. VOLUTA CYMBIOLA (pl. li. f. 75, 76.), *Chemn.*

Testâ oblongâ, crassiusculâ, glabrâ, pallidâ, maculis pallidè fuscis subtrigonulis punctisque castaneis sparsim notatâ; spirâ brevi, subconicâ, apice papillari; anfractibus 5, quorum ultimis duobus ad tribus posticè spiniferis; spinis parvis, acutis; suturâ subtilissimè spinulosâ; anfractu ultimo elongato, anticè subattenuato; aperturâ oblongâ, columellæ plicis quatuor validis.

Shell oblong, rather thick, smooth, of a pale colour, with pale, fuscous subtriangular spots, sprinkled over with chesnut dots, spire short, subconical, with a papillary apex; volutions five, of which the two or three last are furnished posteriorly with small sharp spines; the suture very finely spinulose; the last volution elongated, anteriorly subattenuated; aperture oblong; columella with four distinct folds.

This species does not appear to have been ever noticed either by Lamarck or Swainson, although sufficiently well described and figured by Chemnitz, vol. x. f. 1385, 1386. We still use Chemnitz's name (*Voluta Cymbiola*), for Kiener's assertion that Lamarck had already given that name to another species *is not true*. We have represented two varieties; our f. 75 is in Mr. Cuning's collection and f. 76 in the British Museum.

### 3. VOLUTA CORONA (pl. lv. f. 120, 121.), *Chemn.*

Testâ obovatâ, ex carneo albidâ, punctis rufescentibus ornatâ; longitudinaliter striis exaratâ, striis in anfractuum suturas exeuntibus in spinas subtilissimas et acutissimas; anfractu ultimo posticè spinis coronatâ, spinis anticè fornicatis; columellæ plicis quatuor anticis distinctis, posticis nonnullisque minoribus; apice papillari.

Shell obovate, whitish flesh coloured, ornamented with reddish dots, longitudinally striated, with the striæ at the sutures of the volutions running out into very fine and acute spines; last volution posteriorly crowned with spines, which are vaulted anteriorly; columella with four distinct folds anteriorly, and several smaller posteriorly.

We formerly thought that the shell figured by Chemnitz, vol. x. f. 1387, 1388, was only a young shell of *V. Cymbiola*; however, upon reading over his description in German, we find he mentions a character that does not belong to *V. Cymbiola*—he there mentions, besides four principal folds on the columella, several smaller folds above them. We have therefore copied his figures and drawn up our description from his, as we have never seen the shell.

### 4. VOLUTA LUTEOSTOMA (pl. li. f. 59.), *Chemn.*; *V. chrysostoma*, *Swains.*

Testâ turbinatâ, crassâ, lævi, albicante, lineis angulato-flexuosis maculisque angularibus continuis fusco-castaneis pictâ, spirâ brevi, subconicâ, apice obtuso, anfractibus primis tribus lævibus pallescentibus, cæteris tribus posticè subangularibus, spinis brevibus acutis fornicatis coronatis; anfractu ultimo maximo; aperturâ elongatâ, anticè latiori, intus aureâ, labio externo rotundato, subincrassato, plicis columellæ 4, validis.



Shell turbinated, thick, smooth, whitish, with angularly flexuous dark chesnut lines, and continuous angular spots; spire short, subconical, with an obtuse apex; first three volutions smooth and pale coloured, the remaining three posteriorly subangular, crowned with short, acute, vaulted spines, last volution very large; aperture elongated, broader anteriorly, golden yellow within; outer lip rounded, somewhat thickened, columella with four distinct folds.

Chemnitz says it was found in the East Indian Seas, specimens are in the British Museum and in Mr. Cuming's collection.

5. *VOLUTA IMPERIALIS* (pl. liv. f. 102.), *Lam.*

Testâ turbinatâ, crassâ, lævi, fulvescente, maculis, lineisque angulatis castaneis pictâ, posticè spinis coronatâ, spirâ brevi, anfractibus 4 primis lævibus, politis, apicem papillarem efformantibus, duobus ultimis posticè spinis longiusculis, suberectis, subincurvis, coronatis, anfractu ultimo maximo, anticè paululum reflexo, aperturâ magnâ, intus aurantiaco-flavescente; columellâ quadriplicatâ, plicâ anticâ ferè verticali.

Shell turbinated, thick, smooth, fulvous, marked with angular chesnut lines and spots, and posteriorly crowned with spines, spire short, with a papillary polished apex, formed of the four first smooth volutions; the two last volutions crowned with rather long, nearly erect, somewhat curved strong spines, the last volution very large, anteriorly slightly reflected; aperture large, internally of an orange yellow colour; columella with four folds, of which the anterior is nearly vertical.

From the Philippine Islands, Mr. Cuming.

6. *VOLUTA SCAPHA* (pl. xlv. f. 1, 2; pl. xlviii. f. 35.).

Testâ turbinatâ, ventricosâ, lævi, crassâ, pallescente, maculis lineisque angulato-flexuosis castaneis variè pictâ; spirâ brevi, obtusâ, anfractibus senis, quatuor primis apicem papillarem efformantibus, ultimo maximo, posticè plerumque obtusè subangulato; aperturâ magnâ, labio externo subalato, interno plerumque supra ultimum anfractum subextenso, posticè incrassato, columellâ quadriplicatâ.

Shell turbinated, ventricose, smooth, thick, of a pale colour with chesnut spots and angularly flexuous lines; spire short, obtuse, with a papillary apex, formed of the four first volutions, the last volution very large, generally obtusely subangular posteriorly; aperture large, the outer lip somewhat winged, and the inner generally slightly extended over the last volution, and thickened posteriorly, columella with four distinct folds.

This species is very variable in form ; we have represented three varieties, namely, that with the rounded posterior angle, that which is tuberculated and the ovoid form.

7. *VOLUTA VOLVACEA* (pl. xlv. f 3, 4 ; pl. li. f. 61.), *Lam.*

Testâ ovato-turbinatâ, lævi, crassâ, albido-flavescente, fusco obscure nebulosâ, spirâ breviusculâ, apice parvo, papillari, obtusiusculo, anfractibus senis, ultimo maximo, posticè rotundato, subangulato ; aperturâ magnâ, latiori ; columellæ plicis 4, validis, penultimâ subduplicatâ.

Shell ovato-turbinated, smooth, thick, whitish yellow, clouded with dull brown ; spire short, apex small, papillary, rather obtuse ; volutions 6, the last very large, and posteriorly obtusely subangular ; aperture large, broad ; columella with four distinct folds, the last of which is somewhat doubled.

We have represented the three principal varieties of this shell ; one, which is the usual variety, without spines ; another, with a row of strong vaulted spines around the posterior part of the last volutions, and the ovoid variety : the first is in Mr. Cuming's, the second in Mr. Norris's collection, and the last in the British Museum.

8. *VOLUTA ZEBRA* (pl. liii. f. 83, 84.), *Leach* ; *Zool. Misc.* (1814), vol. i. t. 12. f. 1.

Testâ ovato-oblongâ, crassâ, lævi, albidâ, strigis aurantiaco-castaneis vel castaneis, longitudinalibus, angustis, undulatis, crebris, pictâ ; spirâ brevi, conicâ, apice papillari ; anfractibus  $2\frac{1}{2}$ , primis papillam efformantibus, 3tio 4toque paululum granosis, ultimo magno, posticè ventricosiore ; aperturâ subelongatâ, labio externo crassiore ; columellæ plicis quatuor validis, anticâ minori.

Shell oblong-ovate, thick, smooth, whitish, marked with chesnut or orange chesnut, narrow, undulated, close-set, longitudinal streaks ; spire short, conical, with a papillary apex of  $2\frac{1}{2}$  volutions, the 3rd and 4th volutions slightly granose, the last large, ventricose behind ; aperture somewhat elongated, with a thickened outer lip ; columella with four distinct folds, of which the anterior is the smaller.

Placed by Lamarck among the *Marginellæ*, under the name of *Marginella radiata*, in 1822. We are inclined to regard the *Vol. lineata*, *Leach*, *Zool. Misc.* vol. i. t. 12. f. 2. as a variety of this species ; it differs in being somewhat more elongated, less ventricose, of a darker colour, and in having the spire rather more produced, with the row of granules more distinct ; its outer lip also is not quite so much thickened ; we have represented both varieties.

9. *VOLUTA UNDULATA* (pl. xlviii. f. 28, 29.).

Testâ ovato-subfusiformi, crassâ, lævi, fulvescente, maculis fuscis, lineisque longitudinalibus castaneis undatim flexuosis pictâ, spirâ conicâ, apice papillari; anfractibus senis, tribus primis papillam efformantibus, cæteris tribus solum coloratis; ultimo posticè obtusè subangulato, ventricoso; aperturâ elongatâ, anticè latiori; labio externo incrassato; interno (ætate) expansissimo; columellæ plicis 4, nonnunquam plicâ vel plicis duabus minoribus adjectis.

Shell ovate, subfusiform, thick, smooth, pale fulvous, with darker spots, and undulated, flexuous, longitudinal, chesnut lines; spire conical, with a papillary apex of 3 volutions, the remaining 3 volutions alone being varied in colour, and the last posteriorly obtusely angulated and ventricose, aperture lengthened, broad in front, outer lip thickened; columella with 4 distinct folds, and sometimes with one or two smaller additional folds.

In old specimens the inner lip spreads far over the front of the shell and its margin is much thickened; the folds on the columella also are occasionally more or less irregular. From Australia. We regard the *V. stragulata* of Muhlfeld as a variety of this species.

10. *VOLUTA MACULATA* (pl. liii. f. 85, 86.), *Swains.*; *Exot. Conch.*, p. 23. pl. xxxviii.

Testâ oblongâ, crassiusculâ, lævi, nitidâ, fulvescente, macularum subquadratarum fasciis nonnullis transversis castaneis pictâ; spirâ brevi, obtusâ, apice papillari, papillâ magnâ, anfractuum  $3\frac{1}{2}$  ad 4 sistente; anfractibus cæteris duobus solum pictis, ultimo posticè subventricoso; aperturâ rectâ, elongatâ, latiusculâ, fulvescente; columellæ plicis 4 albis

Shell oblong, thickish, smooth, shining, fulvous, with several transverse bands formed of squarish chesnut spots; spire short, obtuse, with a large papillary apex of  $3\frac{1}{2}$  to 4 volutions, the two remaining volutions only having the spots, and the last being posteriorly somewhat ventricose; aperture straight, lengthened, rather broad, fulvous within; columella with 4 distinct white folds.

A very beautiful Australian species, first described by Swainson. We have represented two varieties, which differ slightly in their proportions; f. 85 is in Mr. Cuming's collection, and f. 86 in the British Museum.

11. *VOLUTA PALLIDA* (pl. liii. f. 91-94.), *Gray*, in Griffith's *Cuvier*, v. 13. pl. xxx. f. 4; *V. Turneri*, *ibid.* pl. xl. f. 1.

Testâ elongato-ovatâ, tenuiusculâ, lævi, fulvescente, spadiceo-

lineatâ, vel pallidè fulvo-bifasciatâ; spirâ brevi, acuminatâ, anfractibus 6, primis 4 immaculatis, cæteris plus minusve coloratis; aperturâ elongatâ, labio externo subincrassato; columellâ plicis 4 validis.

Shell of a lengthened oval form, rather thin, smooth, with dark brown lines, or two pale fulvous bands, spire short, acuminate, volutions 6, the 4 first unvaried in colour, and the other more or less variegated; aperture elongated, outer lip somewhat thickened; columella with 4 distinct folds.

From the coast of New Holland. We are compelled to unite the *V. Turneri* of Gray with his *V. pallida*, because we find nothing to distinguish them except the variations of colour, which cannot be relied on as specific characters.

#### 12. VOLUTA RETICULATA (pl. xlix. f. 47, 48.), *Reeve*.

Testâ oblongo-ovatâ, tenuiusculâ, lævi, fulvescente, castaneo-reticulatâ, fasciis duabus saturationibus, strigis brevibus longitudinalibus nonnullis ante suturam pictis; spirâ brevi, acuminatâ, anfractibus senis, primis 4 fuscis; aperturâ elongatâ, latiusculâ; columellâ plicis quatuor.

Shell oblong-ovate, rather thin, smooth, pale fulvous, reticulated with chesnut, with two darker bands, and with a few short, longitudinal streaks in front of the suture; spire short, with an acuminate apex of 4 fuscous volutions, the remaining volutions two, of which the last is very large; aperture lengthened, rather wide; columella with 4 folds.

From the coast of New Holland. This species differs from *V. pallida* of Gray in its proportions.

#### 13. VOLUTA JUNONIA (pl. xlix. f. 44.).

Testâ ovato-fusiformi, crassâ, lævi, tenerrimè decussatim striatâ, pallidâ, maculis castaneis rotundato-quadratis fasciatim tessellatâ, seriebus macularum duplicatis; spirâ breviusculâ, apice acuto-papillari, infra apicem cancellatim subrugosâ; anfractu ultimo maximo, oblongo, anticè transversim obsoletissimè striato; aperturâ rectiusculâ, elongatâ, subangustâ; labio externo intus subincrassato; columellâ 4-plicatâ.

Shell ovate-fusiform, thick, smooth, very finely decussately striated, of a pale colour, with rounded square chesnut coloured spots, arranged in double transverse rows; spire rather short, with an acute papillary apex; the several smaller volutions are cancellately subrugose, and the last volution very large, oblong, and finely striated transversely in front; aperture straightish, lengthened, rather narrow, outer lip somewhat thickened within; columella with 4 folds.



This extremely rare and valuable shell is said to be brought from the Gulf of Mexico : the few specimens we have seen have measured from  $2\frac{1}{2}$  to 4 inches in length. Lamarck has inadvertently described the columella as *subseptemplicata*.

14. *VOLUTA PUNCTATA* (pl. liii. f. 89, 90.) *Swains.*

Testâ subovali, crassiusculâ, lævi, pallidè fulvâ, maculis saturatioribus subquadratis seriatim dispositis, punctisque concoloribus sparsis pictâ ; spirâ breviusculâ, conicâ, apice obtuso ; anfractibus paucis, ultimo posticè tuberculato, tuberculis parvis ; columellæ plicis 4, validis, albis.

Shell nearly oval, thickish, smooth, pale fulvous, with darker squarish spots disposed in rows, and sprinkled over with dots of the same colour ; spire rather short, conical, with an obtuse apex ; volutions few, the last with small tubercles posteriorly ; columella with 4 distinct white folds.

First described and figured by Swainson in his *Zoological Illustrations*, 1st series, pl. 161, from the only specimen hitherto known, which is imperfect. It is in the British Museum. We think it nearly related to *V. undulata*, and that Swainson has made the apex too acute in his figure.

15. *VOLUTA AULICA* (pl. xlv. f. 9, 10, 11, 12.), *Sol.* ; Tank. Cat. App., p. 19. pl. iii.

Testâ ovato-oblongâ, crassiusculâ, lævi, carneolâ, maculis lineolisque rufis variè pictâ, spirâ conicâ, apice obtuso, papillari ; anfractibus senis, 3 ad 4 primis papillam efformantibus, politis, unicoloribus ; cæteris coloribus variegatis, nonnunquam inermibus, plerumque tuberculis vel spinis brevibus armatis ; ultimo maximo, elongato ; aperturâ elongatâ, posticè acuminatâ, anticè latiori ; columellæ plicis quatuor, validis.

Shell ovate-oblong, rather thick, smooth, flesh coloured, variously marked with red spots and lines ; spire conical ; volutions 6, the 3 or 4 first, which form the obtuse papillary apex, are polished, and of one colour ; the remainder are varied with other colours, sometimes unarmed, frequently armed with tubercles or short spines ; the last very large, lengthened ; aperture lengthened, posteriorly acuminated, anteriorly wider ; columella with four distinct folds.

For a series of valuable observations on this and several other species of *Volutes* by W. J. Broderip, Esq., we refer to the second volume of the *Zoological Journal* ; and descriptions of seven varieties of this species by the same gentleman will be found in Part X. of the *Proceedings of the Zoological Society*. We have represented

four varieties, the first of which is in the British Museum and the remaining three in Mr. Cuming's collection. It is proper to remark that Kiener has not given the true *V. aulica*, but has represented *V. rutila* under the name of *aulica* !

16. *VOLUTA PULCHRA* (pl. li. f. 61.), *nobis* ; Tank. Cat. App. p. 28. pl. iv. f. 2.

Testâ oblongo-ovatâ, subfusiformi, lævi, nitidâ, pallidè carneâ, niveo-maculatâ, maculisque castaneis parvis triseriatim irregulariter dispositis ornatâ ; spirâ subconicâ, subacuminatâ, anfractibus 3 primis papillam subacutam subgranosam efformantibus, cæteris 2-3 posticè adpressis, subangulatis, tuberculatis, tuberculis elongatis, posticè acutiusculis ; columellâ quadriplicatâ.

Shell oblong-ovate, slightly fusiform, smooth, shining, pale flesh-colour with white specks, and ornamented with small chesnut dots, irregularly disposed in three rows ; spire subconical, subacuminated, the three first volutions forming the slightly acute, somewhat granose, papillary apex, the remaining two or three posteriorly pressed together at the sutures, slightly angular and tuberculated, the tubercles elongated and slightly acute posteriorly ; columella with four folds.

Vide Broderip, in Zool. Journ., vol. ii. p. 32. Our figure is drawn from a specimen in Mr. Cuming's collection.

17. *VOLUTA PIPERITA* (pl. li. f. 62.), *nobis*.

Testâ obovatâ, ventricosiusculâ, crassiusculâ, pallescente, quinquefasciatâ, fasciis posticâ medianâ et anticâ brunneo-puncticulatis, strigisque fuscis irregularibus ornatis ; fasciis duabus intermediis pallidioribus, strigis nonnullis lividis, cum strigis fuscis fasciarum alternarum continuis ; anfractibus quinque, tribus primis papillam efformantibus, papillâ lævi, posticè subgranosâ, ultimo maximo, ovali ; aperturâ elongatâ, latiori, intus aurantiacâ ; columellâ plicis 4, validis, labioque columellari aurantiacis.

Shell obovate, rather ventricose, and thickish, of a pale colour with five bands, the posterior, middle, and anterior of which are dotted with brown and ornamented with irregular fuscous streaks, the two intermediate bands are paler, with livid streaks, which are continuous with the brown streaks of the alternating bands ; volutions 5, of which the three first form the papillary apex, which is smooth, and slightly granose posteriorly ; the last volution very large, oval ; aperture elongated, rather wide, orange coloured within ; columella with four distinct folds, orange coloured as well as the columella lip.

A single specimen only is known, which is in Mr. Norris's collection.

18. *VOLUTA RUTILA* (pl. xlv. f. 5, 6.), *Brod.*; *Zool. Journ.* vol. ii. p. 30. tab. III.

Testâ ovato-oblongâ, crassiusculâ, lævi, albidâ rufescenteque variâ, maculis subtrigonis, confluentibus, croceo-rubris, pictâ; spirâ breviusculâ, suturâ simplici, apice papillari, subgranulato; anfractibus senis, ultimo maximo, vel inermi vel nonnunquam tuberculis elongatis armato, fasciisque duabus latis, interruptis, rutilis, ornato; columellâ quadriplicatâ, plicâ anticâ validiori.

Shell oblong-ovate, rather thick, smooth, varied with whitish and reddish, and ornamented with subtrigonal, confluent saffron-red spots; spire rather short, suture uninterrupted; apex papillary, slightly granose; volutions 6, the last very large, sometimes armed with elongated tubercles, and ornamented with two broad, interrupted, rusty red bands; columella with four folds, of which the anterior is the most prominent.

First described and figured by Broderip in the *Zoological Journal*, vol. ii. and figured afterwards by Kiener under the name of *aulica*, which belongs to a very distinct species. We have represented the smooth and the tuberculated varieties.

19. *VOLUTA MAGNIFICA* (pl. liv. f. 103.), *Chemn.*

Testâ ovato-oblongâ, medio ventricosâ, tenuiusculâ, pallidè fulvâ, fasciis latis tribus aurantio-castaneis, albo-fuscoque maculatis, cinctâ; spirâ subconoideâ, apice papillari, anfractibus primis tribus papillam obsoletè granulosa efformantibus, cæteris tribus medio ventricosis; ultimo maximo; aperturâ oblongâ, magnâ, posticè acuminatâ, medio latiori; columellæ plicis quatuor validis, aurantiacis.

Shell oblong-ovate, ventricose in the middle, rather thin, pale fulvous, with three broad orange-chesnut bands, marked with white and fuscous spots; spire subconical, with a papillary apex, formed of the three first volutions, and very obsoletely granulose, the remaining three volutions are ventricose, the last being extraordinarily large; the aperture is oblong, very large, posteriorly acuminate, wider in the middle; columella with four distinct orange coloured folds.

Found in some Australian estuaries. Mr. S. Stutchbury obtained several specimens with the animal alive in about twelve feet water in Rose Bay, Port Jackson.

20. *VOLUTA NIVOSA* (pl. li. f. 63, 64.), *Brod.*

Testâ ovato-oblongâ, crassiusculâ, lævi, cinereo-carneolatâ, maculis parvis niveis adpersâ, fasciisque tribus transversis fusco-lineatis, lineis longitudinalibus; spirâ subconicâ, obtusâ, apice papillari gra-

noso, anfractibus senis, 2-3 ultimis posticè subangulatis, angulo obtuso, plus minusve tuberculato; tuberculis plerumque parvis, nonnunquam validioribus: aperturâ magnâ, oblongo-ovatâ, columellâ croceâ, quadriplicatâ.

Shell oblong-ovate, thickish, smooth, greyish flesh colour, sprinkled with small white specks, with 3 transverse bands, consisting of longitudinal fuscous lines; spire subconical, obtuse, with a papillary granose apex; volutions 6, the 2 or 3 last posteriorly subangular, the angle being obtuse, and more or less tuberculated, the tubercles generally small, sometimes very distinct and pointed; aperture large, oblong-ovate; columella saffron-colour, with four folds.

This species is never entirely free from tubercles, nor is it ever spinose. From Garden Island, Australia.

21. *VOLUTA NORRISII* (pl. li. f. 65.), *nobis*.

Testâ ovatâ, suboblongâ, ventricosâ, coronatâ, cinereo-fulvâ, maculis parvis niveis, alisque fuscis adpersâ, fasciisque duabus transverse fuscis, interruptis, hic illic lineis interruptis longitudinalibus notatis: spirâ brevi, apice papillari, granoso, anfractibus senis, ultimis duobus spinis brevibus, acutis, coronatis; aperturâ magnâ, oblongâ, intus fuscâ; columellâ quadriplicatâ, plicis duabus anticis validioribus.

Shell ovate, rather oblong, ventricose, coronated, greyish brown, sprinkled with small snow-white and brown specks, with two transverse brown interrupted bands, here and there marked with interrupted longitudinal lines; spire short with a papillary granose apex; volutions six, the last two crowned with short sharp spines; aperture large, oblong, brown within; columella with four folds, of which the two anterior are prominent.

Found on the reefs at low water on Dupuch's Island by J. C. Dring, Esq., R. N. In Mr. Cuming's collection; Wagner has figured this species for *V. nirosa*.

22. *VOLUTA VESPERTILIO* (pl. xlvii. f. 15-23, pl. li. f. 67.).

Testâ turbinatâ vel ovato-oblongâ, crassâ, coronatâ, variè coloratâ, plerumque pallidâ, vel carneolâ, maculis, strigisque angularibus fuscis, fulvis vel rufis ornatâ; spirâ brevi, obtusâ; apice papillari, quasi truncato, granoso; anfractibus senis, 2 ad 3 ultimis spinis crassis vel tuberculis plerumque coronatis, nonnunquam ferè muticis; aperturâ oblongâ, posticè subsinuatâ, acuminatâ, labii externi margine posticè subangulâri, pone angulum acuto, anticè rotundato, crasso: plicis columellæ quatuor validis.

Shell turbinated or oblong-ovate, thick, coronated, variously co-



loured, frequently pale or flesh-coloured, ornamented with fuscous, fulvous, or dark red spots and angular streaks; spire short, obtuse, with a papillary granose apex, having the appearance of being truncated, volutions 6, the 2 or 3 last generally crowned with thick spines or tubercles, sometimes almost unarmed; aperture oblong, slightly sinuated and acuminate posteriorly, margin of the outer lip posteriorly subangular, sharp behind the angle, anteriorly rounded, thick; columella with 4 distinct folds.

Referring to Zoological Journal, vol. ii. p. 31, where Broderip says, "After a careful examination of a connecting series of specimens, I am unable to discover any satisfactory specific distinction either in *V. pellis-serpentis*, in *V. mitis*, or in *V. serpentina*, Lam.; nor do I think that any sufficient cause exists for removing them from the situation they formerly occupied as varieties of *V. Vespertilio*, Linn.," we think we need merely add that our own opinion coincides entirely with his; we have therefore regarded them all as varieties of *V. Vespertilio*, and in order to shew the variations of form to which this species is subject, we have given ten figures representing the principal varieties, thus our figures 15, 16, 21, 22, represent Lamarck's *V. Vespertilio*; our figures 17, 20, the *V. pellis-serpentis*, Lam.; our figures 19, 23, light and dark coloured specimens of Lamarck's *V. serpentina*, and our figure 18 shews his *V. mitis*.

23. VOLUTA ANGULATA (pl. xlvii. f. 13, 14.), Swains.; V. Dufrenoyi, Donovan, Nat. Rep., vol. ii. pl. lxxvii. (1824.)

Testâ oblongâ, fusiformi, epidermide vitreâ tectâ, pallidâ, lineis irregularibus castaneis longitudinaliter undatâ; spirâ breviusculâ, acuminatâ, apice acutiusculo, anfractibus 5 ad 6, duobus ultimis posticè angulatis, ponè angulum planis, ultimo maximo; aperturâ oblongâ, posticè angulatâ, anticè effusâ, pallidè aurantiacâ; columellâ triplicatâ, anticè acutâ, plicâ posticâ obsoletiori.

Shell oblong, fusiform, covered with a shining epidermis, of a pale colour, with irregular undulated longitudinal chesnut lines; spire rather short, acuminate, with a rather acute apex; volutions 5 to 6, the two last angular posteriorly, and flat behind the angle, the last very large; aperture oblong, posteriorly angular, anteriorly effuse, pale orange coloured; columella with three folds, the anterior of which is sharp, and the posterior rather obsolete.

This was published many years since by Swainson under the name of *angulata*, but it has lately been republished by Wagner under the appellation of *V. nasica*: of course Swainson's name has the right of priority, though the apex is sometimes extended in a manner so remarkable as fully to justify the latter name.

24. *VOLUTA FERUSSACH* (pl. xlv. f. 7.), *Donovan*; Nat. Rep., vol. ii. pl. lxvii. (1824.) rudis, *Gray*; in Griffith's Cuvier, vol. xiii. pl. xxx. f. 1. (1834.)

Testâ ovatâ, crassiusculâ, rudi, fuscescente; spirâ brevi, subacuminatâ; apice papillari; anfractibus  $4\frac{1}{2}$ , ultimo longè maximo, ventricosus; suturâ indistinctâ, subdecurrente; aperturâ magnâ, latâ, posticè acuminatâ, labio externo tenuiusculo, interno incrassato; columellâ quaduplicatâ, plicis, anticâ validâ, duabus intermediis mediocribus, posticâ subobsoletâ.

Shell ovate, rather thick, and rough, brownish; spire thick and short, somewhat acuminate; apex papillary; volutions  $4\frac{1}{2}$ , the last being by far the greatest, and ventricose; suture indistinct, and somewhat decurrent; aperture large, broad, acuminate posteriorly, outer lip rather thin; inner lip thickened; columella with four folds, of which the posterior is nearly obsolete, the two intermediate are moderate sized, and the anterior very distinct.

Two specimens of this species, both in very bad condition, are in the British Museum. A third specimen is to be seen in the Rev. Mr. Crotch's collection.

25. *VOLUTA ANCILLA* (pl. liv. f. 101.), *Sol.*, *MSS.*

Testâ oblongâ, ventricosiusculâ, tenuiusculâ, fulvescente, interdum flammulis castaneis pictâ, spirâ conoideâ, exsertiusculâ, anfractibus 5, subventricosis, ultimo maximo, obovato, suturâ subplicatâ, aperturâ elongatâ, columellâ triplicatâ.

Shell oblong, rather ventricose and thin, of a brownish yellow colour, sometimes with chesnut coloured irregular streaks; spire conical, rather prominent; volutions 5, somewhat ventricose, the last very large, and obovate; suture slightly plaited; aperture elongated; columella with three folds.

There is little more than its more ventricose form to distinguish this species from *V. Magellanica*. Both species are abundant about the southern extremity of South America. The number of folds on the columella appears to vary from 3 to 5.

26. *VOLUTA SUBNODOSA* (pl. xlvii. f. 24.), *Leach*; Zool. Misc., vol. i. t. 8.

Testâ oblongâ, ventricosâ, tenuiusculâ, fulvescente, flammulis castaneis variè pictâ, spirâ conoideâ, exsertiusculâ, anfractibus 5, subventricosis, primo lævi, intermediis subnodosis, ultimo maximo, obovato; suturâ subplicatâ; aperturâ elongatâ; columellâ triplicata.

Perhaps this should be regarded as only a variety of *Voluta Ancilla*. It is also brought from the Straits of Magalhães.

27. *VOLUTA MAGELLANICA* (pl. liv. f. 99.).

Testâ ovato-elongatâ, tenui, læviusculâ, fulvescente, flammulis ferrugineis angustis, longitudinalibus, undatis, pictâ; spira elongatâ, subpapillari, anfractibus 7, ultimis quatuor subventricosis; ultimo magno; aperturâ oblongâ, posticè acuminatâ, anticè latiori; labio interno supra anfractum ultimum extenso; columellâ 2- vel 3-plicatâ.

Shell elongated oval, thin, nearly smooth, brownish yellow, with narrow undulated longitudinal ferruginous streaks; spire elongated, somewhat papillary, volutions 7, the four last rather ventricose, the last very large; aperture oblong, acuminate posteriorly, and broad in front; inner lip spread over the last volution; columella with two or three folds.

Distinguished from *V. Ancilla* by its much more elongated shape; the number of folds on the columella is variable as in that species; they do not, however, appear to be so numerous in this.

From the Straits of Magalhæns.

28. *VOLUTA BRASILIANA* (pl. liv. f. 98.), *Sol.*, *MSS.*

Testâ ovatâ, ventricosâ, crassiusculâ, glabratâ, fulvescente, immaculatâ; spirâ brevi, papillari, papillâ angustâ; anfractibus quinque, ultimo maximo, inflato, posticè subangulato, nodifero; aperturâ latâ; columellâ biplicatâ.

Shell ovate, ventricose, rather thick, nearly smooth, pale brownish yellow, without spots; spire short, papillary, papilla narrow; volutions 5, the last very large, inflated, posteriorly subangular and tuberculated; aperture wide; columella with two folds.

This appears to be a rare species; it is found on the coasts of Brazil; we have never seen it in good condition though we have occasionally met with the remains of an epidermis, which is very thin and deciduous, and of a dirty brown colour.

29. *VOLUTA TUBERCULATA* (pl. l. f. 49, 50.), *Cymbiola tuberculata*, *Swains.*; *Exot. Conch.*, p. 19. pl. 29.

Testâ ovatâ, crassâ, læviusculâ, brunneo-fulvescente, maculis, lineisque angulatim flexuosis, castaneis, ornatâ; spirâ acuminatâ, breviusculâ; apice papillari, papillâ parvâ; anfractibus  $5\frac{1}{2}$ , ultimis duobus posticè tuberculiferis, ultimo maximo; aperturâ magnâ, oblongâ, posticè subacuminatâ; labii externi margine incrassato; labio interno supra anfractum ultimum expanso, crassiusculo; columellæ plicis 3 ad 5, subirregularibus.

Shell ovate, thick, nearly smooth, brownish yellow, with flexuous

angular lines and spots of a chesnut colour; spire acuminated, rather short, with a small papillary apex; volutions  $5\frac{1}{2}$ , the two last posteriorly tuberculated, the last very large; aperture large, oblong, somewhat acuminated posteriorly, outer lip with a thickened edge, inner lip rather thick, spread over the last volution; columella with from three to five rather irregular folds.

An extremely rare species, of which the finest specimen we have seen, from which our figure is taken, is in Mr. Norris's collection. Mr. Cuming and the British Museum also possess the species.

30. *VOLUTA BECKII* (pl. liv. f. 104.), *Brod.*; *Zool. Proc.* 1836, p. 43.

Testâ ovato-fusiformi, tenui, læviusculâ, fulvescente, lineis subangulatis, castaneis, inscriptâ; transversim striatâ, striis minutis, subundulatis; spirâ mediocri, anfractibus senis, ultimis quatuor posticè tuberculato-subplicatis, ultimo maximo, oblongo; aperturâ ovato-elongatâ; columellâ triplicatâ, plicis subirregularibus.

Shell ovato-fusiform, thin, nearly smooth, brownish yellow, with chesnut-coloured, rather angular lines; transversely striated, the striæ small, somewhat undulated; spire moderate, with six volutions, the four last of which are posteriorly tuberculato-subplicate; the last very large, oblong; aperture of a lengthened oval; columella with three somewhat irregular folds.

This volute, published in 1836 by Broderip under the name of *Voluta Beckii*, has since been figured by Kiener under the name of *fusiformis*, a name which had been given by Swainson to a very distinct species in the Bligh Catalogue, and to which species Kiener has given a new name in a most absurd manner. *Voluta Beckii* occasionally reaches twelve inches in length.

31. *VOLUTA PACIFICA* (pl. xlviii. f. 25, 26, 27.), *Sol.*, *MSS.*; Variety, *V. elongata*, *Swains.*

Testâ oblongo-fusiformi, crassiusculâ, lævi, fulvescente, lineis irregularibus fasciisque quatuor interruptis castaneis notatâ; spirâ acuminatâ, papillari, papillâ parvâ, anfractuum duorum compositâ; anfractibus cæteris quinque ventricosiusculis, posticè plùs minùsve tuberculiferis, ultimo maximo, subventricosus; aperturâ elongatâ, posticè acuminatâ, anticè latiori; labio externo incrassato, paululum reflexo, interno extenso, anticè laminam crassam efformante, columellâ 4- ad 6- plicatâ, plicis irregularibus, plerumque validis.

Shell oblong-fusiform, thickish, smooth, yellowish brown, with irregular chesnut lines, and four interrupted bands of the same co-



lour; spire acuminated, with a small papillary apex, consisting of two volutions; the remaining five volutions rather ventricose, posteriorly more or less tuberculiferous, the last very large, somewhat ventricose; aperture lengthened, posteriorly acuminated, anteriorly rather broad; outer lip thickened, slightly reflected, inner lip extended, forming a rather thick lamina anteriorly; columella with from four to six irregular, mostly distinct folds.

A variety of this species, more or less free from tubercles, has been described as a distinct species by Swainson, under the name of *elongata*, in his *Exotic Conchology*. Mr. Broderip has proved by a careful examination of a number of specimens that it is only a variety, see *Zool. Journ.* vol. v. p. 332.

32. *VOLUTA GRACILIS* (pl. lv. f. 117, 118.), *Swains.*, *Journ. of Science*, xvii. p. 32.

Testâ oblongo-fusiformi, crassiusculâ, lævi, fulvescente, lineis irregularibus, angulosis, castaneis, pictâ; spirâ acuminatâ, apice papillari, anfractibus senis, 3 ad 4 intermediis tuberculato-costatis, ultimo subtuberculato-costato, nonnunquam lævigato; labio externo margine incrassato, columellæ plicis quatuor validis.

Shell oblong, fusiform, thickish, smooth, brownish yellow, with irregularly angular chesnut lines; spire acuminated, with a papillary apex; volutions 6, of which the 3 or 4 intermediate are longitudinally ribbed and posteriorly tuberculated, the last sometimes smooth, sometimes having the same character as the intermediate ones; edge of the outer lip thickened; columella with four distinct folds.

First described by Swainson; notwithstanding the assertion in the second edition of his *Exotic Conchology*, we think it entitled to rank as a distinct species. Kiener refers to this species in his text as a variety of *Magellanica*, and in his plate as a young *elongata*. From New Zealand.

33. *VOLUTA BULLATA* (pl. liii. f. 88.), *Swains.*

Testâ ovato-oblongâ, lævi, tenuiusculâ, fulvâ, lineis angulatim undulatis maculisque castaneis notatâ; spirâ brevî, obtusâ, apice papillari; anfractibus  $4\frac{1}{2}$ , ultimo maximo; labio externo posticè versùs spiram ascendente; columellâ anticè plicis duabus validis.

Shell oblong-ovate, smooth, rather thin, with chesnut spots and angular undulated lines; spire short, obtuse, with a papillary apex; volutions  $4\frac{1}{2}$ , the last very large; outer lip extending up toward the spire posteriorly; columella with 2 distinct folds in front.

An exceedingly rare species from Algoa Bay, South Africa. It

was first described and figured by Swainson in his *Zoological Illustrations*, second series ; but has been omitted by Kiener with many others. We have only seen two specimens, the one from which our figure was drawn is in the British Museum.

34. *VOLUTA MAMILLA* (pl. l. f. 57, 58.), *Gray*.

Testâ ovato-oblongâ, tenui, lutescente, apice mamillari, obtusissimo, subspiralî ; anfractibus duobus, ultimo magno, ovali, maculis lineisque castaneis picto ; aperturâ magnâ, columellæ plicis tribus.

Shell ovate-oblong, thin, brownish yellow, with a mammillary subspiral, very obtuse apex ; volutions two, the last of which is large, oval, marked with chesnut coloured spots and zigzag lines ; aperture large ; columella with three folds.

From New Holland ; a single specimen is in the British Museum, which appears to be only a very young shell ; it is a very remarkable species, forming the link that unites *Cymba* with *Voluta*, the apex in this species being subspiral, while in *Cymba* the apex is amorphous.

35. *VOLUTA FULGETRUM* (pl. xlviii. f. 33, 34.), *nobis* ; Tank. Cat. App., p. 28. pl. iv., v. ; Brod., Zool. Journ., vol. ii. p. 35.

Testâ oblongâ, tenuiusculâ, lævissimè transversim striatâ, fulvo-carneâ, strigis flammiferis, enormiter angulosis, castaneis, ornatâ ; spirâ productiori, apice truncato-papilloso, anfractibus senis, ultimis tribus gibbis, ultimo ventricoso, posticè subangulari ; aperturâ oblongâ, posticè acutiusculâ ; labio columellari tenui, supra anfractum ultimum extenso ; columellâ triplicatâ.

Shell oblong, rather thin, very finely transversely striated, yellowish flesh coloured, with very angular, flame-like, chesnut streaks ; spire rather prominent, with a truncate-papillary apex, volutions 6, the three last gibbous, the last ventricose, and posteriorly subangular ; aperture oblong, posteriorly rather acute ; columella lip thin, spread over the last volution ; columella with three folds.

Several varieties of this rare species are now to be seen in collections, we have represented two ; and a third which is in the British Museum has two rows of chesnut spots on the last volution.

36. *VOLUTA PAPILLOSA* (pl. xlviii. f. 30.), *Swains.*, in Appendix to Bligh Catalogue.

Testâ oblongo-ovali, crassâ, lævi, pallidâ, lineis fulvis subtilissimè reticulatâ, fasciisque castaneo-fulvis, transversis, interruptis, ornatâ ; spirâ brevi, subacuminatâ, apice papillari, papillâ crassâ, anfractuum duorum compositâ ; anfractibus cæteris tribus coloratis.

ultimo magno, ovali; aperturâ oblongâ, posticè acuminatâ, labii externi margine incrassato; interni crasso, extenso; columellâ ante mediam subgibbâ, 3- ad 5- plicatâ.

Shell oblong-oval, thick, smooth, reticulated with very fine fulvous lines, and with interrupted transverse chesnut yellow bands, spire short, rather acuminate, with a thick papillary apex of two volutions, the three remaining volutions coloured, the last large and oval; aperture oblong, posteriorly acuminate, outer lip with the margin thickened, inner lip thick, spread; columella anteriorly gibbous, with from 3 to 5 folds.

From the Fijee Islands: a remarkable species of extreme rarity.

37. *VOLUTA FUSIFORMIS* (pl. liv. f. 100.), *Swains.*, in Appendix to Bligh Catalogue.

Testâ oblongo-fusiformi, crassiusculâ, lævi, fulvâ vel carneo-fulvâ, maculis lineisque angularibus castaneis ornatâ; spirâ acuminatâ, subelongatâ; apice papillari, papillâ anfractuum duorum parvâ; anfractibus cæteris quinque subgibbis, ultimo paululum ventricosum, anticè subcoarctato; aperturâ magnâ, posticè subacuminatâ, medianè latâ; labio columellari tenuiusculâ, expansâ, columellâ anticè acutâ, plicis 3 ad 4 parvis, perobliquis, anticâ majori.

Shell oblong, fusiform, thickish, smooth, fulvous or somewhat flesh-coloured, with chesnut spots and angular lines; spire acuminate, rather elongated, with a small papillary apex of two volutions, the five remaining volutions rather gibbous, the last slightly ventricose, and contracted anteriorly; aperture large, posteriorly subacuminate, broad in the middle, columellar lip rather thin, spread; columella anteriorly sharp, with from three to four small very oblique folds, the anterior of which is the largest.

Probably from the Pacific Ocean; first described by Swainson in the Bligh Catalogue.

38. *VOLUTA MEGASPIRA* (pl. xlviii. f. 31, 32.), *nobis*.

Testâ fusiformi, turritâ, tenuiusculâ, lævi, rufescente-carneolatâ, strigis maculisque castaneis, notatâ; spiræ anfractibus senis, subclongatis, medio ventricosiusculis, primis duobus apicem papillarem efformantibus, 3tio, 4to, 5to et 6to obtusè longitudinaliter costatis, ultimo magno, oblongo, anticè attenuato, aperturâ oblongâ, labio externo subreflexo; columellâ quinqueplicatâ, plicis posticis obtusis parvis.

Shell fusiform, turreted, rather thin, smooth, of a reddish flesh colour, marked with chesnut streaks and blotches; volutions of the spire six, rather elongated, rather ventricose in the middle, the two

first forming the papillary apex, the 3rd, 4th, 5th, and 6th, with obtuse longitudinal ribs, the last large, oblong, attenuated anteriorly; aperture oblong, outer lip slightly reflected; columella with five folds, the posterior of which are small and obtuse.

I have only seen a single specimen which is in Mr. Cuming's extraordinary collection; it is probably the same as Kiener's *V. lyriformis*, but it is not the same as Broderip's, which is identical with Swainson's *Mitra lyriformis*. Its papillary apex closely resembles that of *V. fulminata*.

### 39. VOLUTA FULMINATA (pl. l. f. 51, 52, 53.).

Testâ oblongâ, fusiformi, tenuiusculâ, plerumque transversim impresso-striatâ, carneo-fulvescente, lineis longitudinalibus castaneis flexuosis pictâ; spirâ acuminatâ, apice papillari, lævi, anfractuum duorum composito; anfractibus cæteris quatuor longitudinaliter costato-subtuberculatis; ultimo posticè obtusè angulato, subtuberculato, anticè coarctato, acuminato, densè transversim costato; aperturâ elongatâ, labio externo, subeffuso, subincrassato, anticè margine subdenticulato; columellâ anticè acutâ, 6- ad 10- plicatâ, plicis variis.

Shell oblong, fusiform, rather thin, generally with transverse impressed striae, yellowish flesh coloured, with flexuous, longitudinal chesnut lines; spire acuminated, with a smooth papillary apex of two volutions, the four remaining volutions longitudinally ribbed, and tuberculated, the last posteriorly obtusely angular, subtuberculated, anteriorly contracted and acuminated, closely transversely ribbed; aperture elongated; outer lip somewhat effuse and thickened, with the anterior edge slightly toothed; columella sharp anteriorly, with 6-10 variously prominent folds.

We have represented three varieties of this not uncommon species; of these fig. 62 shows the ordinary character.

### 40. VOLUTIA DUBIA (pl. lv. f. 115.), *Brocl.*; Zool. Journ., vol. iii. p. 81. pl. iii. f. 1.

Testâ fusiformi, longitudinalitèr subcostatâ, transversim striatâ, flavicante, maculis fulvis subquadratis, fasciatim digestis, ornatâ; spirâ brevi; apice acuto-papillari; anfractibus 4, primo læviusculo, papillam efformante, secundo tertioque brevibus, ultimo elongato, subventricosus, aperturâ oblongâ, posticè acuminatâ, anticè subattenuatâ, integrâ; columellæ plicis duabus obsoletiusculis.

Shell fusiform, slightly ribbed longitudinally, transversely striated, yellowish, with somewhat square fulvous spots arranged in bands; spire short, with an acute papillary apex; volutions 4, the first



nearly smooth forming the papilla, the 2nd and 3rd short, the last lengthened, somewhat ventricose; aperture oblong, posteriorly acuminate, narrower anteriorly, entire; columella with two nearly obsolete folds.

This very singular species approaches nearest to *V. fulminata*, its locality is unknown; it was lent to me many years since by M. Roussel, and we have not a single specimen in England.

41. *VOLUTA VEXILLUM* (pl. l. f. 54, 55, 56.).

Testâ ovatâ, subfusiformi, crassâ, lævi, nitente, albidâ, fasciis seu tæniis aurantio-rubris plûs minûsve numerosis cinctâ; spirâ subconicâ, apice muricato-papillari, anfractuum 2 ad  $2\frac{1}{2}$  composito; anfractibus 4 cæteris obsoletissimè tuberculiferis, ultimo posticè tuberculis subcompressis remotiusculis coronato, columellæ plicis 6 ad 8, tribus posticis minimis, anticis 2 ad 3 plerumque crassis.

Shell ovate, subfusiform, thick, smooth, shining, whitish, with more or less numerous orange red narrow bands or fillets; spire somewhat conical, with a small pointed papillary apex, of from 2 to  $2\frac{1}{2}$  volutions; the four remaining volutions very obsoletely tuberculated, the last posteriorly crowned with rather remote and compressed tubercles; columella with from six to eight folds, of which the three posterior are very small, and the two or three anterior generally thick.

This is commonly called the Orange Flag, we have given two varieties, of which the more slender has been distinguished as a species by some French collectors.

42. *VOLUTA INDICA* (pl. li. f. 68, 69, 70.), *nob.*; *V. Lapponica* auctm.

Testâ ovatâ, subfusiformi, crassiusculâ, lævigatâ, pallidâ, maculis punctis lineolisque castaneis variè pictâ; spirâ subacuminatâ, apice papillari anfractuum 2 ad  $2\frac{1}{2}$  sistente; anfractibus tertio quartoque longitudinaliter costatis, quinto subcostato, sexto subventricoso, lævi, ultimo magno, ovali, anticè transversim obsoletè striato; aperturâ longiusculâ, posticè acutâ, anticè latiusculâ; labio externo intûs subincrassato, posticè subdecurrente, columellâ 6-ad 8-plicatâ, plicis anticis maximè majoribus, posticis parvis.

Shell ovate, subfusiform, thickish, smooth, of a pale brownish flesh colour, variously marked with chesnut spots, dots, and lines; spire subacuminated, with a small papillary apex of 2 or  $2\frac{1}{2}$  volutions, the 3rd and 4th volutions longitudinally ribbed, 5th slightly ribbed, 6th rather ventricose, smooth, last large, oval, and obsoletely transversely striated anteriorly; aperture rather long, acute

posteriorly, and rather broad in front; outer lip rather thickened within, running slightly towards the spire posteriorly; columella with from six to eight folds, of which the anterior are much the larger, and the posterior are small.

This shell has been named *Lapponica* by Linné, who has evidently been misled by Rumphius to suppose it an inhabitant of the North American seas; it is, however, really found in the East Indian Ocean, wherefore we have altered its name to *Indica*.

43. *VOLUTA HEBRÆA* (pl. liv. f. 95, 96, 97.).

Testâ ovato-turbinatâ, crassâ, pallidè fulvâ, lineis castaneis undatis veniformibus, confertim fasciatis, interruptis, cinctâ, spirâ conicâ, plûs minûsve productâ, apice papillari, parvo, anfractuuum 2 ad  $2\frac{3}{4}$  composito, anfractibus cæteris 3 ad 6 vel 7 tuberculatis, tuberculis plûs minusve acutis, ultimo posticè tuberculis acutis, majusculis, muricato, plicis columellæ quinque anticis majoribus, nonnullis posticis minimis.

Shell ovato-turbinate, thick, of a pale fulvous colour, with interrupted close set bands of chesnut coloured undulated vein-like lines; spire conical, more or less produced, with a small papillary apex of of 2 to  $2\frac{1}{2}$  volutions, the remaining 3 to 6 or 7 volutions with more or less acute tubercles, the last with rather large acute tubercles posteriorly; columella with 5 rather large folds in front, and a few very small posteriorly.

We have represented three varieties of this species; f. 95 shews the variety with the more produced spire, from a specimen in Mr. Norris's collection; f. 96, the variety with a short spire, from Mr. Cuming's collection; and f. 97, the variety without tubercles, from Miss Saul's collection.

44. *VOLUTA MUSICA* (pl. xlix. f. 36-43.).

Testâ ovato-turbinatâ, nonnunquam oblongâ, crassâ, lævi, plerumque pallidâ, nonnunquam fulvâ, aurantiacâ, carneolatâ, seu subfuscâ, castaneo vel aliis coloribus variè maculatâ, fasciis tribus transversis, plûs minûsve distinctis, lineis transversis fuscis, parallelis compositis; aliisque duabus punctis compositis, ad margines intermedios maculis nigris majoribus ornatâ; spirâ breviusculâ, conicâ, nonnunquam productiori, apice papillari, papillâ parvâ, subrudi, anfractibus tribus efformatâ; anfractibus cæteris 3 ad 4 tuberculis magnis oblongis instructis, ultimo anticè posticèque striis transversis subrugoso; columellæ plicis 9 ad 12, anticis 5 ad 6 majoribus.

Shell ovate, turbinated, sometimes oblong, thick, smooth, generally of a pale colour, or brownish, variously spotted with chesnut

and other colours, with 3 transverse, more or less distinct bands, composed of transverse, parallel, fuscous lines, together with 2 other dotted lines, marked in the intermediate edges with large black spots; spire rather short, conical, sometimes rather prominent, with a small mis-shapen papillary apex of 3 volutions, the remaining 3 or 4 volutions furnished with large oblong tubercles; the last both anteriorly and posteriorly roughened with transverse striæ; columella with from 9 to 12 folds, of which the 5 or 6 anterior are the larger.

This is another of the species that varies so excessively both in form and colours, that it is not surprising that Lamarek, who had but comparatively slight opportunities, should have distinguished its varieties specifically; we have carefully examined a great series of them, from which we are satisfied that Lamarek's *V. Thiarella*, *V. carneolata*, *V. guineaica*, *V. lævigata*, and probably his *V. nodulosa*, are merely varieties of *V. musica*. We have represented each of the principal varieties.

45. *VOLUTA SULCATA* (pl. liii. f. 17.), *Lam.*

Testâ oblongo-ovatâ, crassâ, subrugosâ, pallidè fulvâ, longitudinalitèr costatâ, costis obtusis; transversim sulcatâ; spirâ breviusculâ, obtusâ, anfractibus tribus primis papillam efformantibus, ultimo fasciis subfuscis duabus lineisque parallelis castaneis, seriebus tribus macularum castanearum instructis; columellâ plicis 10 ad 11.

Shell oblong-ovate, thick, rather rugose, pale fulvous, with obtuse longitudinal ribs, and transversely grooved; spire rather short, obtuse, with a papillary apex formed of the 3 first volutions; the last volution with 2 subfuscous bands, with several parallel chesnut lines, and three rows of chesnut spots; columella with 10 or 11 folds.

This species closely resembles several of the varieties of *musica*; it shows moreover the same general system of coloration. We have ventured to consider it distinct, on account of its transverse grooves from one end of the last volution to the other.

46. *VOLUTA POLYZONALIS* (pl. lii. f. 77, 78.), *Lam.*

Testâ subconicâ, turbinatâ, subcrassâ, transversim sulcatâ, cinereo-virescente, castaneo-punctulatâ, tæniis transversis plurimis pallescentibus sparsim fusco-guttatis; spirâ brevi, conicâ, anfractibus duobus primis papillam parvam efformantibus, cæteris 5 submuricato-tuberculatis; ultimo posticè angulato, tuberculis acutis coronato; aperturâ oblongâ, subobliquâ, utrâque extremitate subangulari; labio externo incrassato, maculato, posticè tenui; columellâ 12- ad 14- plicatâ, plicis variis, anticis plerumque majoribus.

Shell subconical, turbinated, thickish, transversely grooved, greenish ash-colour, with small chesnut dots, and many pale transverse fillets sprinkled with fuscous specks; spire short, conical, with a papillary apex of 2 volutions, the remaining 5 volutions with pointed tubercles, and the last volution crowned with sharp tubercles; aperture oblong, rather oblique, somewhat angular at both ends; outer lip thickened, spotted, thin at the posterior edge; columella with from 12 to 14 variable folds, the anterior being generally the larger.

Easily distinguished from all the varieties of *musica*. Lamarck's *V. fulva* is merely a worn variety of this species, and we think his *V. chlorosina* will prove to be nothing more. We have represented two varieties; f. 77, from Mr. Norris's collection, and f. 78, from Miss Saul's.

47. *VOLUTA PUSIO* (pl. lv. f. 119.), *Swains.*

Testâ ovato-turbinatâ, crassâ, lævigatâ, fulvescente, fasciis pallidis, punctisque fulvis seriatim dispositis cinctâ; spirâ brevi, apice acuto; anfractibus 6, ultimo leviter costato, posticè obtusè nodoso; labio externo subexpanso; columellâ subincrassatâ, multiplicatâ, plicis nonnullis validis, aliis intermediis posticisque parvis.

Shell ovate-turbinated, thick, smooth, pale fulvous, with darker coloured bands and spots arranged in rows, spire short, with an acute apex; volutions 6, the last slightly ribbed and obtusely tuberculated posteriorly; outer lip somewhat spread; columella rather thickened, with many folds, some of which are distinct, and others, which are intermediate and posterior, are small.

Perhaps this ought to be merely regarded as a variety of *Voluta polyzonalis*, from which it differs principally in its proportions; being wider and having a shorter spire. We are not acquainted with its locality. The specimen is in the British Museum.

48. *VOLUTA CUMINGII* (pl. lv. f. 105, 106, 107.), *Broderip*; Zool. Proc., 1832, p. 33.

Testâ ovato-pyramidalî, crassâ, albidâ, cæruleo-castaneo nebulosâ, suturas versus nigro-castaneo vittatâ, spirâ subelongatâ, apice acuto; anfractibus tuberculatis, ultimo subcostato, costis tumidis, fasciâque subcentrali pallidâ, latâ cincto; labro tumido, subcontracto, subreflexo, acuto, varice interno obliquo submedio; columellâ 5 ad 6 plicatâ, plicis tribus anticis majoribus, cæteris indistinctis.

Shell ovate-pyramidal, thick, whitish, clouded with blueish chesnut, and banded near the suture with blackish chesnut; spire somewhat elongated, with an acute apex; volutions tuberculated, the last



partly ribbed, with tumid ribs, and a broad, pale coloured, nearly central band; lip tumid, somewhat contracted and reflected, with an internal, oblique, nearly central varix; columella with 5 or 6 folds, of which the three anterior are large, and the remainder indistinct.

First brought by Mr. Cuming from the Gulf of Fonseca, in the Province of San Salvador, Central America. We have represented three varieties, two from Mr. Cuming's collection, and one from Mr. Norris's.

49. *VOLUTA GULDINGII* (pl. lv. f. 110, 111.), *nobis*.

Testâ oblongâ, crassâ, fulvescente, lineolis saturatioribus aliisque albis pictâ, spirâ acuminatâ, apice obtuso, anfractibus 5 ad 6, sub-ventricosis, longitudinaliter costatis, interstitiis costarum transversim striatis, ultimo magno, lævigatiusculo; aperturâ mediocri, labio externo extûs incrassato, albicante, intûs dente parvo instructo; columellæ plicis quinque ad sex parvis, anticis duabus validioribus.

Shell oblong, thick, fulvous, marked with little white lines, and others of a darker colour, spire acuminated, with an obtuse apex; volutions 5 to 6, rather ventricose, longitudinally ribbed, interstices of the ribs with transverse striæ, the last volution large, rather smooth; aperture middle-sized, outer lip externally thickened, whitish, furnished with a small tooth internally; columella with 5 or 6 folds, of which the two anterior are more prominent.

This is the smallest known species of *Volute*; it was discovered at St. Vincent's, by the late Rev. Lansdowne Guilding. In Mr. Cuming's and Mr. Metcalfe's collections.

50. *VOLUTA CYLLENIFORMIS* (pl. lv. f. 112. 113.) *nobis*.

Testâ parvâ, ovatâ, crassâ, læviusculâ, albicante, maculis parvis flavicantibus sparsim ornatâ; spirâ subconicâ, anfractibus senis, posticè coarctatis, ad suturam granosis, anticè longitudinaliter costatis, ultimo magno, anticè transversim striato, canali parvo, sub-reflexo; aperturâ oblongâ, labio externo extûs incrassato, margine interno intûs dente parvo instructo, labio columellari anticè ruguloso, dentibus tribus parvulis munito.

Shell small, ovate, thick, rather smooth, whitish, sprinkled with small yellowish specks, spire somewhat conical, with 6 volutions, which are contracted posteriorly, granose at the sutures, and longitudinally ribbed anteriorly, the last volution is large, and anteriorly transversely striated; canal small, slightly reflected; aperture oblong, outer lip externally thickened, its internal edge furnished with

a small tooth, columellar lip rugulose, anteriorly furnished with three small teeth.

The only specimen of this curious little shell we have seen is in the collection of W. Metcalfe, Esq., who has obligingly permitted us to describe and figure it. In general appearance it nearly resembles a *Cyllene*.

51. *VOLUTA HARPA* (pl. lv. f. 114.), *Barnes*; *Annals of the Lyceum of Nat. Hist. of New York*, vol. i. p. 139. pl. ix. f. 4.

Testâ ovali, crassâ, læviusculâ, albido-carneolâ, maculis punctisque castaneis seriatim transversè pictâ, spirâ breviusculâ, acuminatâ, apice acuto; anfractibus novem, brevibus, ultimis 4 longitudinalitèr costellatis, ultimo autem obsoletè transversim striato; labio externo extûs varice instructo, intûs unidentato, margine tenui, posticè decurrente; columellâ plicis tribus anticè instructâ, aliisque duabus vel tribus inconspicuis.

Shell oval, thick, rather smooth, pale flesh colour, with chesnut spots and dots in transverse rows; spire rather short, acumined, with an acute apex; volutions 9, short, the last four with small longitudinal ribs, and the last having also obsolete transverse striæ; outer lip with an external varix, and a single tooth within, its edge thin and posteriorly decurrent; columella with three distinct folds anteriorly, and 2 or 3 indistinct behind.

From the coast of Peru; in Mr. Cuming's and other collections.

52. *VOLUTA COSTATA* (pl. lii. f. 71, 72.), *Swains.*, *Journal of Science*, vol. xvii. 1824, p. 33; *V. lyrata*, *Sowerby*, *Tankerville*, *Cat.* no. 2140; *V. Anna*, *Lesson*.

Testâ ovato-oblongâ, tenuiusculâ, nitidâ, albidâ, maculis lineisque interruptis aurantiacis transversim fasciatâ; spirâ brevi, obtusâ, anfractibus 5 ad 6, duobus primis papillam mediocrem efformantibus, cæteris longitudinalitèr costatis, costis subdistantibus, posticè mucronatis, anfractu ultimo anticè transversim costellato; labio externo extûs varicem instructo, margine tenui; columellâ plicis tribus, anticis majoribus, plurimis posticis minimis distinctâ.

Shell oblong-ovate, rather thin, shining, whitish, transversely banded with orange coloured spots and interrupted lines; spire short, obtuse, with a moderate sized papillary apex of 2 volutions, the remaining volutions with somewhat distant longitudinal ribs, each rib being posteriorly mucronated, with a rather flat space between the ends of the ribs and the suture; last volution transversely striated in front; outer lip furnished with an external varix, and

a thin edge; columella with three large anterior, and many very small posterior, folds.

This species has long been known in this country under the name of *V. lyrata*, of Humphrey. It is *Harpula Harpa*, of Swainson, Exot. Conch.; and Lesson has published it in his *Illustr. Zoologiques*, under the name of *V. Anna*. It is not the *V. mitriformis* of Lamarck.

53, *VOLUTA DELESSERTIANA* (pl. lii. f. 73, 74.), *Petit*; *Mag. de Zool.*, 1842, pl. lvii.

Testâ oblongâ, subfusiformi, crassiusculâ, longitudinalitèr multicostatâ, carnicolore, aurantiaco-sphacelatâ et fasciatâ, castaneoque lineatâ; anfractibus duobus primis papillam parvam lævigatam efformantibus, cæteris quinque subventricosis, longitudinalitèr costatis, costis crebris, flexuosis, interstitiis costarum transversim striatis; suturis crenatis; anfractu ultimo magno: aperturâ oblongâ, intûs albâ, margine castaneo-punctato; labio externo extus varicem instructo, labio columellari subexpanso, plicis anticis tribus validis, posticis plurimis filiformibus.

Shell oblong, subfusiform, thickish, longitudinally many-ribbed, flesh colour, with orange coloured blotches and bands and chesnut lines; the two first volutions form the small papillary smooth apex, the remaining five are subventricose, and longitudinally ribbed, ribs close set, flexuous, transversely striated in the interstices; sutures crenated; last volution large; aperture oblong, white within, the margin spotted with chesnut; outer lip furnished with an external varix; inner lip rather spread; columella with 3 distinct folds anteriorly, and many thread-like folds posteriorly.

From Nosse-Bé, on the north coast of Madagascar; *Petit*. This species has been named by M. Petit in honour of M. Delessert.

54. *VOLUTA MITRIFORMIS* (pl. lii. f. 81, 82; pl. lv. f. 109.), *Lam.*; *V. multicostata*, *Brod.*; *Zool. Journ.* vol. iii. pl. iii. f. 2.

Testâ oblongâ, subfusiformi, crassiusculâ, pallescente, maculis castaneis variis subfasciatâ; spirâ subacuminatâ, apice papillari, papillâ minutâ; anfractibus cæteris 5 longitudinalitèr crebrè costatis, transversè castaneo-lineatis; ultimo anfractu anticè transversim costato-subrugoso; aperturâ oblongâ, labio externo extûs varicem instructo; columellâ multiplicatâ, plicis anticis majoribus subternis.

Shell oblong, subfusiform, thickish, pale, somewhat banded with various chesnut spots; spire subacuminate, with a small papillary apex, the remaining five volutions longitudinally closely ribbed, with

transverse chesnut lines, the last volution anteriorly transversely somewhat rugose, with small ribs; aperture oblong, outer lip furnished with an external varix; columella with many folds, of which the two or three anterior are much the larger.

From the Australian and Javan seas, according to Lamarck. Broderip's *V. multicostata* is undoubtedly identical with this species, as he seems to have suspected it might be: it varies greatly in colouring.

55. *VOLUTA LYRÆFORMIS* (pl. xlix. f. 45, 46.), *Broderip*; *Zool. Journ.* vol. iii. p. 83. pl. iii. f. 3; *Mitra lyræformis*, *Swains.*; *Zool. Illus.* t. 54.

Testâ fusiformi-turritâ, crassiusculâ, pallidè carneolâ, maculis lineisque subcæruleis, castaneis, rubro-castaneisque, fasciatim congestis, transversis, pictâ; spirâ valdè productâ, attenuatâ, apice acuto-papillari; anfractibus 7, primis 1 ad  $1\frac{1}{2}$  papillam efformantibus, cæteris longitudinaliter costatis (costis interstitiisque longitudinaliter striatis,) ultimo anticè transversim sulcato-corrugato; aperturâ subelongatâ, posticè acuminatâ: labio externo extûs varicem instructo; columellâ multiplicatâ, plicis anticis majoribus, cæteris parvis.

Shell fusiform-turreted, thickish, pale flesh colour, with blueish, chesnut, and chesnut-red spots and transverse lines, arranged in bands; spire much produced, attenuated, with an acute papillary apex of 1 to  $1\frac{1}{2}$  volutions, the remaining 5 or  $5\frac{1}{2}$  volutions longitudinally ribbed, (ribs and interstices longitudinally striated); the last volution anteriorly transversely grooved, rugose; aperture somewhat elongated, acuminated posteriorly, outer lip with an external varix; columella with many folds, of which the anterior are large, and the remainder very small.

First published by Swainson under the name of *Mitra lyræformis*, afterwards, at his suggestion, altered to *Voluta lyræformis* by Mr. Broderip. From the Eastern coast of Africa. Kiener pretends to have been acquainted with this species, but his figures represent a totally different one, not even nearly related to it.

56. *VOLUTA CONCINNA* (pl. li. f. 66.) *Broderip*; *Zool. Proc.*, 1836, p. 43.

Testâ oblongâ, fusiformi, tenuiusculâ, lævi, transversim subtilissimè striatâ, costatâ, fulvescente, lineis castaneis confertis undulatis pictâ; spirâ subacuminatâ, anfractibus 6-7, longitudinaliter costatis, medio subnodosis, ultimo maximo, anticè acuminato; aperturâ magnâ, angustiore; labio externo tenui; columellæ plicis 4, obsoletiusculis.



Shell oblong, fusiform, rather thin, smooth, transversely and very finely striated, longitudinally ribbed, yellowish brown with close-set undulated chesnut lines, spire subacuminate; volutions 6-7, longitudinally ribbed, subtuberculated in the middle; the last very large, acuminate anteriorly; aperture large and narrow, outer lip thin; columella with 4 rather obsolete folds.

A single specimen of this remarkable *Volute* was brought to England by M. Marguier; it is now in the British Museum. There is some resemblance between this and *V. lyræformis*, Kiener.

57. *VOLUTA NUCLEUS* (pl. lv. f. 116.), *Lam.*

Testâ ovatâ, crassiusculâ, fulvâ, vel fulvescente, maculis seu punctis castaneis albidisque transversè seriatim dispositis notatâ; spirâ breviusculâ, conicâ acuminatâ; anfractibus 6 ad 7, duobus primis minimis, lævibus, cæteris longitudinaliter costatis, ultimo anticè transversim striato; aperturâ ovali, posticè subacuminatâ, columellâ plicis duabus anticis majoribus, tertiâ parvâ, nonnullis obsoletis.

Shell ovate, thickish, fulvous or fulvescent, with chesnut and whitish spots or dots arranged in transverse rows; spire rather short, conical, acuminate, volutions 6 to 7, the two first very small and smooth, the remainder longitudinally ribbed, the last transversely striated anteriorly; aperture oval, subacuminated posteriorly; columella with two distinct anterior folds, a third quite small, and several others nearly obsolete.

From Australia. *Schubert* and *Wagner* have given it under the name of *V. Perdicina*. This species has much the appearance of a little *Harpa*; it may nevertheless be very easily distinguished from the fossil *V. Harpula*, which is much more elongated, and which has numerous small folds on the posterior part of the columella.

58. *VOLUTA FESTIVA* (pl. lii. f. 79, 80.), *Lam.*

Testâ ovato-fusiforimi, crassiusculâ, subventricosâ, longitudinaliter costatâ, glaberrimâ, carneolatâ, maculis lineolis verticalibus, guttisque fulvis subseriatim ornatâ; spirâ subelongatâ, anfractibus  $6\frac{1}{2}$ , primis  $1\frac{1}{2}$  papillam efformantibus, cæteris 4 ad 5 costis obtusis longitudinalibus instructis, costis prope suturam obsoletis; anfractu ultimo anticè subacuminato, transversim striato; columellâ anticè triplicatâ, plicis perobliquis.

Shell ovate-fusiform, thickish, somewhat ventricose, longitudinally ribbed, very smooth, with fulvous spots, vertical lines, and dots, arranged in rows; spire somewhat elongated, with a papillary apex of  $1\frac{1}{2}$  volutions, the remaining four or five volutions with obtuse longitudinal ribs, which are nearly obsolete at the suture; last

volution anteriorly subacuminate, and transversely striated; columella with 3 very oblique folds in front.

The above description has been drawn up from a drawing which we caused to be made many years past, at the Jardin des Plantes, at Paris; we have never seen any other specimen. The drawing is now obligingly communicated to us by W. J. Broderip, Esq.

## VOLUTA.

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## A MONOGRAPH OF THE GENUS

## TELLINA.

By SYLVANUS HANLEY, B.A., F.L.S., Etc.

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*Char. Gen.* Testa bivalvis, cujus latus posticum aut plicaturâ irregulari radiante tumescit, aut cardo ejus dentem dentesve duos laterales ostendit; dentes primarii duo, vel in utrâque, vel in alterâ valvulâ; margo ventralis nunquam crenatus; pallii cicatrix maximè sinuata; nymphæ haud prominentes. Ligamentum externum.

There are few genera whose definition is more difficult than that of Tellina. The typical species with a strong fold or umbonal ridge and two distinct lateral teeth, cannot indeed be confounded with the shells of any other genus; but the whole of the aberrant division, in which the fold is oftentimes nearly obsolete and the hinge always devoid of lateral teeth, require the strictest examination, so closely do they approximate to Sanguinolaria and Psammobia. Lamarck himself has included several species of this division in Psammobia and Psammotæa (the latter genus abolished by the unanimous agreement of all conchologists); but the authority of Deshayes gives weight to my own opinion, of the necessity of their annexation to Tellina. The externally projecting nymphal callosities which support the prominent ligament, characters which are universal throughout Psammobia, are never present in Tellina of this division. I may remark moreover, as a further assistance to the discrimination of those closely allied genera, that the inclination of the line which unites the posterior muscular impression to the parallel scar is *ascending* in those aberrant species which most nearly approach Psammobia, whilst it is *descending* in *that genus*. I speak more particularly of Psammobia, as there exists in some of its species a fold almost equally profound (but symmetrical) with that of the majority of the Tellinæ. This does not exist in Sanguinolaria, of which I regard Rosea and not Rugosa as the type.

Certain Donaces, devoid of crenulated margins, might probably



be mistaken for *Tellinæ*, but these being always perfectly equivalve, strong, wedge-shaped, or triangular shells, with a remarkably short prominent ligament, and the anterior side the more compressed, present a combination of characters which are never united in any of those *Tellens* in which the characteristic fold is imperfectly developed. The decided sinuation of the palleal scar suffices to separate any species from *Lucina*, *Corbis*, or *Astarte*.

## DESCRIPTION.

*\* Two lateral teeth in one of the valves.*

1. *TELLINA ROSTRATA* (pl. lxi. f. 157.) *Lin.*, Syst. 1118; *Lin. Mus. Ulr.* 481; T. Spengleri, *Chem.* vol. vi. f. 88, 89; Wood, *Gen. Conch.* t. 37. f. 2; Lam. no. 8; Hanl. *Des. Cat.* p. 62. t. 4. f. 35; Enc. *Méth.* t. 287. f. 5.

T. testâ elongato-subtrigonâ, angustâ, subinæquivalvi, subæquilaterali, solidâ, convexiusculâ, subflexuosâ, extus intusque candidâ, prope nates roseo pallidè pictâ, concentricè sulcatâ; sulcis confertis, obliquis; margine ventrali subrecto aut convexiusculo; dorsali utrinque subrecto et subæqualiter declivi; areis dorsalibus sublevigatis, squamis tuberculosi, utrinque dentatis; latere antico subacuminato; postico subrostrato, biangulato; costâ umbonali angulatâ; ligamento subinfosso; dentibus lateralibus magnis, remotis.

Elongated-subtriangular, narrow, rather flexuous, almost equilateral, rather inequivalve, solid, moderately convex, white both externally and internally, with a slight tinge of rose-colour near the beaks, closely and obliquely grooved concentrically; ventral edge but little convex; dorsal margins nearly straight, and almost equally sloping; dorsal areas nearly smooth, and environed by scaly tubercles; anterior side subacuminated; posterior biangulated and subrostrated; umbonal ridge angulated; ligament sunken; lateral teeth strong and distant.

Island of Ticao, &c,

This is not the *Rostrata* of Gmelin, Lamarck, nor the majority of writers, but nevertheless, as was surmised by Schumacher from the expression “*ano rimâque, subserratis*,” is the species indicated by Linnæus, as his specimen in the Linnæan Society’s cabinet clearly evidences.

2. *TELLINA DESHAYESII* (pl. lvii. f. 66.) *Hanley*, Zool. Proc. 1844.

T. testâ *T. Rostratæ* simillimâ, sed albido-roseâ, et lamellis sub-remotis concentricè ornatâ; margine etiam ventrali convexiore.

Extremely like *T. rostrata*, but of an uniform pale pinkish hue, and the surface ornamented with concentric and rather distant lamellæ; the ventral margin more convex likewise, than in the preceding species.

Red Sea?

3. *TELLINA CUMINGII* (pl. lviii. f. 72.) *Hanley*, Zool. Proc. 1844.

T. testâ elongato-oblongâ, subæquilaterali, solidâ, compressiusculâ, vix nitidâ, albidâ aut flavescente, maculis strigis lineisve brunneis aut fusco-purpurascentibus radiatâ; concentricè sulcatâ, sulcis anticè confertis et subimbricatis, posticè sublamellosis, remotiusculis; margine ventrali convexo, utrinque sursum acclinato; dorsali utrinque subdeclivi, anticè convexiusculo, posticè subrecto, subincurvato, subdentato; latere postico attenuato, rostrato, paululum brevior, ad extremitatem biangulato; costâ umbonali valde prominente; ligamento inconspicuo; superficie internâ albidâ aut flavidâ; dentibus lateralibus validis, subæquidistantibus.

Elongated-oblong, narrow, subequilateral, solid, rather compressed, scarcely glossy, whitish, radiated with narrow brown or chocolate-brown streaks or spots; concentrically sulcated, sulci fine, becoming elevated posteriorly, strong and coarse on the very prominent umbonal ridge, attenuated in the hollow beyond, and projecting again so as almost to dentate the straight or slightly concave ligamental margin; slopes very gentle; front dorsal area barred with coloured streaks; anterior extremity rounded, but somewhat attenuated; hinder side narrowed, subrostrated, and somewhat biangulated at the extremity; inside white or pale yellowish; lateral teeth strong, and nearly equidistant.

Guacomayo and America.

4. *TELLINA CRUCIGERA* (pl. lviii. f. 78, 79; and pl. lxii. f. 178.) *Lam.*, no. 7; *Hanl. Des. Cat.* p. 61.

T. testâ oblongâ, convexâ, inæquilaterali, nitidiusculâ, albidâ. lineis maculisque fulvo-aurantiis aut roseo-purpureis plerumque radiatâ; (rarius immaculatâ, et radio brevi roseo ad umbones utrinque ornatâ), sulcis exilibus, distinctis, paululum obliquis, concentricè exaratâ; margine ventrali convexo, posticè sursum acclinato; dorsali anticè convexiusculo et vix paululum declivi, posticè

vix convexiusculo satisque declivi; latere antico manifestè longiore; postico attenuato, subrostrato; extremitate anticâ rotundatâ; posticâ angulatâ; costâ umbonali conspicuâ; ligamento haud prominente; superficie internâ albidâ aut flavidâ; dentibus lateralibus distinctis, æquidistantibus.

Oblong, solid, convex, but slightly glossy, inequilateral, whitish, with (in the typical variety) two deep crimson short rays (thus forming a St. Andrew's cross upon the umbones), but usually only adorned with more or less interrupted rays of tawny-orange or faint lineated markings of purplish crimson, rather obliquely distinctly but not coarsely concentrically grooved; anterior side much the longer, and rounded at its extremity, its dorsal slope slight but convex; posterior side attenuated, the slightly convex ventral edge rising on that side, so as to form a beak in its junction with the moderately sloping and scarcely convex ligamental one; umbonal ridge blunt but conspicuous; inside white or yellowish, the lateral teeth distinct, and equidistant. The typical variety is extremely rare, I have only seen two specimens in the collection of William Walton, Esq., and the original one in the French Museum.

Catbalonga, Isle of Samar; &c.

5. *TELLINA ANTONII* (pl. lviii. f. 74, 75; and pl. lx. f. 131.) *Philippi*, Ab. und Bes. Conch. pt. v. t. 5. f. 3.

T. testâ oblongo-elongatâ, solidâ, convexâ, albidâ aut purpureâ, maculis lineisve nebulosis radiantibus fusco-purpureis rubro-roseis aut fulvo-aurantiis plerumque ornatâ, concentricè sulcatâ et obsolete radiatim striatâ; sulcis posticè sublamellosis; margine ventrali anticè crenato, posticè retuso et sursum acclinato; dorsali anticè vix declivi, posticè subrecto subincurvato satisque declivi; latere postico manifestè brevior, rostrato; flexurâ costâque umbonali conspicuis; ligamento subdepresso; dentibus lateralibus validis, subæquidistantibus.

Elongated-oblong, solid, convex, somewhat glossy, variable in colouring being uniform whitish or purple (both within and without), but more commonly subradiated by purplish brown or rosy-red markings on a whitish ground; surface with very distinct concentric sulci, which become strong elevated striæ as they approach the prominent umbonal ridge, on and beyond which they become sublamellar; the interstices traversed by nearly obsolete radiating striæ; ventral edge swelling out in front and sloping upwards behind, so as to render the narrow and biangulated posterior extremity rostrated; anterior side decidedly the longer, its extremity rounded, its slope very slight; ligamental edge straightish

but somewhat incurved, its slope moderate: flexure conspicuous; lateral teeth strong and nearly equidistant.

Guadeloupe.

6. *TELLINA VERRUCOSA* (pl. lxviii. f. 77.) *Hanley*, Zool. Proc. 1844.

T. testâ oblongo-elongatâ, solidâ, compressâ; aut flavidâ rubropurpureo radiatâ, aut pallidè roseâ radius subalbidis angustis zonisque saturationibus ornatâ; valvulâ alterâ undique (natibus excipiendis) verrucosâ; alterâ medio concentricè sulcatâ, lateribus solùm verrucosâ; verrucis ellipticis aut semilunatis, in seriebus vix interruptis, concentricè ordinatis; margine ventrali anticè subarcuato, posticè sursum acclinato; dorsali anticè convexiusculo et vix subdeclivi, posticè subrecto, subdeclivi; latere antico longiore, rotundato; extremitate posticâ attenuatâ, subrostatâ, obliquè subbiangulatâ; ligamento haud prominente; flexurâ ventrali costâque umbonali conspicuis; dentibus lateralibus magnis, æquidistantibus.

Elongated-oblong, depressed, solid, yellowish with reddish crimson rays or pale pink with deeper concentric bands and paler narrow rays; surface roughened in one valve by concentrically arranged and frequently connected compressed wart-like tubercles, which on the disc of the other valve are replaced by concentric elevated sulci; anterior side the longer, rounded; ventral edge arcuated anteriorly and curving upwards to the angulated posterior extremity so as to render it subrostrated and attenuated; slopes gentle, ligament not prominent; lateral teeth large.

Corrigidor, Bay of Manilla.

7. *TELLINA RASTELLUM* (pl. lxiv. f. 231. and pl. lxv. f. 242) *Hanley*, Zool. Proc. (April) 1844; *Hanl. Des. Cat. sup. t. xiv. f. 14.* *T. Philippii*, *Anton Ab. und Bes Conch. part v. t. 5.*

T. testâ elongatâ, solidâ, convexiusculâ, æquilaterali, flavidâ, pallidè roseo radiatâ; anticè sulcatâ, posticè squamosâ, squamis erectis, lamellosis, in iisdem seriebus cum sulcis concentricis, ordinatis; margine ventrali vix convexiusculo; dorsali utrinque paululum declivi, anticè vix convexiusculo, posticè recto ant subincurvato; latere postico attenuato, subrostrato, ad extremitatem obliquè biangulato; extremitate anticâ rotundatâ; ligamento costâque umbonali, conspicuis; superficie internâ albidâ, umbones versus aurantio utrinque fucatâ; dentibus lateralibus validis, subæquidistantibus.

Elongated, solid, moderately convex, equilateral, yellowish with pale crimson rays, the concentric sulci posteriorly so interrupted as to form rows of thin tooth-like scales, and so arranged that the



teeth of one line are just beneath the interstices in the other; dorsal slopes gentle, the posterior one nearly straight, anterior extremity somewhat narrowed and rounded, posterior end much attenuated and subrostrated; ventral edge but little convex; umbonal ridge, ligament, and flexuosity, very prominent; inside white, disc tinged with orange, a short orange ray on either side near the beak; lateral teeth strong, and subequidistant.

Zanzibar.

A species sometimes confused with *Pulcherrima*, but much more elongated, the striae stronger, and the scales entirely absent from the posterior side. It is not possibly the *Aspera* of Gmelin, but that shell is too briefly described for recognition.

8. *TELLINA PULCHERRIMA* (pl. lxi. f. 165.) *Sowerby*, Tank. Cat. App. p. 3. t. 1. f. 1; Hanl. Des. Cat. p. 67. sup. t. 11. f. 14; Knorr. vol. iv. t. 25. f. 1.

T. testâ oblongâ, solidâ, convexiusculâ, subæquilaterali, flavo rubroque radiatâ, in medio concentricè et tenuiter sulcatâ; utrinque squamosâ, squamis erectis, dentiformibus aut sublunatis; margine ventrali convexiusculo; dorsali utrinque leviter declivi; extremitate anticâ rotundatâ; posticâ subattenuatâ, angulatâ; superficie internâ albidâ, umbones versus aurantio tinctâ; dentibus lateralibus validis, subæquidistantibus.

Oblong, solid, moderately convex, subequilateral, rayed with pale crimson red and yellow, concentrically sulcated; sulci fine and terminated at either extremity and near the little arcuated ventral margin, by sublunate scales, which in some specimens become more elevated and somewhat tongue-shaped; dorsal slopes gentle; anterior extremity rounded; posterior rather attenuated; lateral teeth very strong, and nearly equidistant.

Var. *a*. More elongated, sulci and scales stronger and more numerous. Var. *b*. Sulci very fine and rather oblique; scales visible along the ventral margin.

Singapore, and Straits of Banca (Cuming).

9. *TELLINA ASPERRIMA* (pl. lx. f. 135.) *Hanley*, Zool. Proc., 1844.

T. testâ oblongo-ellipticâ, convexiusculâ, solidiusculâ, flavidâ aut incarnatâ, roseo-radiatâ; totâ superficie externâ squamis asperimâ; squamis anticè sublunatis, posticè (et præsertim supra costam umbonalem distinctam) spinosis; margine ventrali medio subrecto, flexurâ distinctâ; dorsali utrinque subdeclivi, et paululum convexi-

usculo; latere antico brevior; extremitate posticâ subbiangulatâ, attenuatâ; dentibus lateralibus magnis, antico approximato.

Oblong-elliptic, moderately convex, rather solid, flesh-coloured, with dull crimson rays, the entire surface rough with tooth-like scales, which become more crowded at the rounded anterior extremity, and between the distinctly indicated umbonal ridge and the nearly straight posterior edge rise into rather distant elevated fangs; slopes gentle; posterior side the longer, its extremity angulated; ventral edge nearly straight; teeth very distinct, the lateral large, the anterior lateral approximate. The scales are replaced near the beaks by raised concentric striæ.

An unique specimen, in the cabinet of Mr. Cuming, was found by him at Sual, province of Sangasinan, Isle of Luzon (sandy mud, six fathoms). Allied to *Pulcherrima*.

10. *TELLINA SULCATA* (pl. 60. f. 138.) *Wood*, Gen. Conch. p. 178. t. 47. f. 1; Hanl. Des. Cat., t. 4. f. 63; Dilw. p. 89.

T. testâ ovali-subtrigonâ, solidâ, subcompressâ, subæquilateralî, subimpolitâ, albidâ aut flavescente, concentricè sulcatâ et radiatim striatâ; sulcis elevatis, subconfertis, ad costam umbonalem prominentem rudioribus; flexurâ conspicuâ; margine ventrali convexo; dorsali utrinque (et præsertim posticè) declivi, anticè subrecto, posticè recto aut subincurvato; latere postico leviter subrostrato, attenuato; extremitate posticâ biangulatâ; superficie internâ flavidâ; dentibus lateralibus validis, subæquidistantibus.

Oval-subtriangular, solid, rather depressed, subequilateral, rather dull, white or pale straw coloured, with regular rather close raised concentric sulci, which become sublamellar on the prominent umbonal ridge; the interstices with radiating striæ; ventral edge convex; flexure conspicuous; anterior dorsal slope gentle, and nearly straight; posterior side attenuated, its dorsal slope straight and rather strong, its extremity biangulated; inside yellowish; lateral teeth strong and nearly equidistant.

A small specimen was procured by Mr. Cuming, at Catbalonga, Isle of Samar.

11. *TELLINA INTERRUPTA* (pl. lxiii. f. 207.) *Wood*, Gen. Conch. (1815), p. 146. t. 36. f. 3; Dilw. 75. *T. maculosa*, *Lam.* (1818) no. 4; Chem. vol. vi. f. 73; Enc. Mèth. t. 288. f. 7.

T. testâ ovali aut ovali-oblongâ, æquilateralî, solidâ, subventricosâ, impolitâ, albâ, lineis undosis angularibus lividis brunneis fulvis aut purpureis nebulosâ aut subradiatâ; concentricè sulcatâ, sulcis posticè membranaceis; margine ventrali subarcuato; dorsali utrinque declivi et convexiusculo; latere postico attenuato, subros-

trato; extremitate postică angulată; costă umbonali prominente; natibus plerumque purpureis; umbonibus flavis; ligamento magno; superficie internă flavidă; dentibus lateralibus magnis, subæquidistantibus.

Var. Testă angustiore; sulcis remotioribus; margine ventrali rectiore, dorsali utrinque minus declivi.

Oval or oval-oblong, equilateral, solid, subventricose, not polished, white crowded with narrow zigzag linear streaks of fawn-colour brown chocolate or purple, beaks usually tipped with purple, umbones yellowish; surface with moderately distant raised concentric sulci, which become more elevated but *not* thickened on the conspicuous umbonal ridge; ventral edge moderately arcuated; anterior side rounded at its extremity, the dorsal slope gentle; posterior side attenuated, subrostrated, the slope strong and very slightly convex, the tip obtusely angulated; inside tinged with yellow; lateral teeth very strong, subequidistant.

Var. Narrower and more elongated; dorsal edges less sloping; ventral edge straighter; sulci rather more distant.

Surinam. The *T. Mexicana* of the 'Revue Cuvierienne,' is now regarded by its author as an elongated variety of this species.

12. *TELLINA VIRGATA* (pl. lxiii. f. 212.) *Linn. Sys.*, p. 1116; *Chem.* vol. vi. f. 67; *Enc. Mèth.* t. 288. f. 2; *Mawe's Conch.* t. 6. f. 1; *Lam.* no. 5; *Hanl. Des. Cat.* p. 61. t. 3. f. 3; *Wood, Gen. Conc.* t. 35. f. 2, 3.

T. testă ovali, subtrigonă, solidă, convexiusculă, subæquilaterali, flavă, roseo-purpurascente radiată, concentricè sulcată; sulcis anticè subimbricatis, posticè rudioribus magisque elevatis; margine ventrali posticè sursum acclinato, medio subrecto, anticè arcuato, carină umbonali prominente; latere antico brevior, rotundato; postico attenuato, subrostrato; margine dorsali postico elongato, declivi, subincurvato; ligamento magno; superficie internă aurantio tinctă; dentibus lateralibus validis, subæquidistantibus.

Oval, subtriangular, solid, moderately convex, nearly equilateral, rich yellow, either uniform, or closely rayed with dull purplish crimson; the concentric sulci becoming closer and slightly imbricated anteriorly, and coarser more prominent and distant as they approach the projecting umbonal ridge; ventral edge subarcuated in front, nearly straight in the middle, and sloping up towards the attenuated and subrostrated posterior extremity; ligamental edge somewhat incurved, much sloping; ligament large and prominent; within usually tinged with orange, the lateral teeth strong and subequidistant.

Indian Ocean.

13. *TELLINA JUBAR* (pl. lxiii. f. 214.) *Hanley*, Zool. Proc. 1844. *T. virgata*, var. *Wood*, Gen. Conc. t. 36. f. 2. Enc. Mèth. t. 288. f. 4. (bad).

*T. testâ* specie priore magis triangulari, altiore, minus elongatâ; rubro-purpureâ, radiis albis aut albidis ornatâ; margine ventrali subarcuato; dorsali utrinque decliviore; superficie internâ albidâ, aut coloribus externis fucatâ.

Extremely like *Virgata*, but more triangular and less elongated, the dorsal slopes being more sudden; the ventral edge is more convex, and less straight in the middle; the external colouring of broader and narrower white rays on a dull rosy or reddish ground, is frequently visible on the otherwise white surface of the interior.

Mus. Cuming.

The ligamental margin inclines to convexity, which is the reverse of what we meet with in *Virgata* and *Marginalis*.

14. *TELLINA MARGINALIS* (pl. lxiii. f. 216.) Dilw. Des. Cat. p. 74; Chem. f. 68, (tolerable).

*T. testâ* *Virgatæ* et *Jubaris* maximè assimili, altiore autem, magisque rotundatâ; margine ventrali planè arcuato, posticè sursum acclivi; dorsali utrinque leviter declivi; superficie externâ albidâ, radiis rubescentibus ornatâ.

Closely allied to the two preceding, but less oblong than either; the ventral edge much more arcuated, and ascending abruptly on the posterior side; the ligamental edge sloping, but slightly and somewhat concavely; the colouring whitish, with pale rosy-red or deep flesh-coloured rays; interior nearly white.

Indian Ocean? &c.

15. *TELLINA STAURELLA* (pl. lx. f. 148. and pl. lxi. f. 171. and pl. lxv. f. 261.) *Lam.*, no. 6; Hanl. Des. Cat. p. 61. sup. t. 11. f. 33; Delessert, t. 6. f. 2; Chem. vol. vi. f. 70, 71; Philip. Ab. und Bes. Conch. part v. t. 5. f. 6. *T. scalaris*, *Lam.* no. 29.

*T. testâ* ovali aut oblongo-ovali, solidâ, convexâ, nitidâ, extus intrusque albidâ aut flavidâ, radiis angustis roseis confertis plerumque ornatâ; concentricè sulcatâ, sulcis anticè subobliquis et subimbricatis, posticè submembranaceis et paucioribus (plerumque in valvulâ alterâ omnino obsoletis); margine ventrali convexo; dorsali anticè subdeclivi et vix convexiusculo, posticè declivi et subrecto; latere antico manifestè longiore, postico attenuato; extremitate posticâ obtusè angulatâ; natibus plerumque roseis, nonnunquam cruce roseo-rubrà notatis; ligamento magno, subconspicuo; dentibus lateralibus magnis, subæquidistantibus.



Oval or oblong-oval, solid, convex, glossy, white or yellowish, with narrow pink or rosy rays (which often become obsolete,) and concentric sulci, which, subimbricated in front, are almost lamellar towards the decidedly shorter posterior side, where in one valve they almost always become obsolete; dorsal slopes rather gentle; ventral edge convex; posterior extremity attenuated and angulated; umbonal ridge distinct; inside whitish or tinged with yellow, beaks tinged with rose-colour; lateral teeth strong and nearly equidistant.

Var. *a*, with two short rays at the beak in each valve, forming a small crimson cross; a smooth posterior area in one valve. Var. *b*, beaks with a very large crimson cross; no rays; sulci finer; area as in last. Var. *c*, rays distinct; no smooth area. Var. *d*, As last, but perfectly white, and oval-oblong.

*T. scalaris* is but an abbreviated variety of this very variable species, with the posterior side more strongly biangulated and less attenuated at the extremity. The typical specimen of the French Museum is yellow, (externally very pale) with the apical cross of a rich red and very small.

Philippines &c., very common.

16. *TELLINA GUILDINGII* (pl. lvi. f. 1.) *Hanley*, Zool. Proc. 1844.

*T. testâ oblongâ, tenui, compressâ, subæquilaterali, albidâ, radiis aurantio-roseis zonisque albido-roseis ornatâ; sulcis exilibus confertis concentricè exaratâ; margine ventrali subrecto, medio subretuso; dorsali utrinque declivi, et vix convexiusculo; latere postico paululum brevior, attenuato; extremitate posticâ infernè angulatâ, anticâ rotundatâ; natibus acutis; costâ umbonali et flexurâ ventrali inconspicuis; ligamento prominente; dentibus lateralibus magnis, æquidistantibus.*

Oblong, thin, compressed, subequilateral, whitish, with narrow roseate flesh-coloured rays, and fine close-set concentric sulci; ventral edge nearly straight, rather retuse in the middle; dorsal margin scarcely at all convex or sloping on either side; posterior side very slightly the shorter, attenuated, its extremity angulated below (biangulated in the young, and the ligamental edge retuse); anterior end rounded; umbonal ridge obsolete; flexure inconspicuous; ligament prominent; inside pale; lateral teeth large, and equidistant.

West Indies.

17. *TELLINA PULCHELLA* (pl. lvi. f. 4.) *Lam.*, no. 23; *Hanl. Des. Cat.* p. 64. sup. t. 1. f. 4; *Philip. En. Mol. Sicil.* vol. i. p. 24.

*T. rostrata*, *Born.* t. 2. f. 10 ; *Poli. Tes. Sic.* vol. xv. f. 8 ; *T. virgata*, var. *Chem.* vol. vi. p. 72.

*T.* testâ oblongâ, angustâ, tenui, compressâ, nitidâ, radiis roseis vel roseo-aurantiis et albidis vel flavidis eleganter ornatâ, striis confertis exilibus concentricè sulcatâ ; margine ventrali subrecto ; latere antico producto, rotundato ; postico brevior, valde attenuato, subrostrato ; margine dorsali anticè paululum declivi, posticè valde declivi, convexo, intusque roseo ; natibus albidis ; superficie internâ albedo-roseâ ; dentibus lateralibus validis, antico subapproximato.

Var. testâ omnino roseâ.

Elongated-oblong, very thin, compressed, glossy, rayed with rose-colour and white, the former often passing into orange, the latter tinged usually with yellow ; more rarely of an uniform rose-colour, except the tips of the beaks which are always pale or whitish ; most delicately but regularly and closely striated concentrically ; ventral edge nearly straight ; anterior side produced, its slope very gentle, its extremity rounded ; posterior side shorter, much attenuated, subrostrated, the dorsal slope great but convex ; inside pink, ligamental edge rosy ; lateral teeth strong, anterior one subapproximate.

Mediterranean.

18. *TELLINA VIRGULATA* (pl. lvi. f. 5.) *Hanley*, *Zool. Proc.* 1844.

*T.* testâ *Donacina* similimâ, sed paululum angustior, striisque exilioribus ornatâ ; extus intusque albidâ, roseo-radiatâ ; radiis latis, haud interruptis ; margine dorsali anticè albedo.

Extremely like *Donacina*, but the shape is slightly narrower, the striae more delicate, and the colouring consists of a few interrupted rose-coloured rays upon a white ground ; the interior dorsal edge is white.

Mus. Cuming.

19. *TELLINA DISTORTA* (pl. lvi. f. 6.) *Poli*, *Test. Sic.* vol. i. t. 15. f. 11 ; *Philip. Mol. Sic.* vol. i. p. 25.

*T.* testâ ovato-oblongâ, compressiusculâ, tenui, nitidâ, subpellucidâ, pallidè roseâ aut aurantio-roseâ, radiis saturatoribus plerumque pictâ ; concentricè striatâ, striis minimis et posticè elevatis ; margine ventrali convexiusculo ; dorsali utrinque subrecto, anticè minimè declivi ; latere antico longior, ad extremitatem obtusè rotundato ; extremitate posticâ cuneiformi, paululum subrostratâ ; flexurâ costâque umbonali subinconspicuis ; ligamento parvo, satis prominente ; dentibus lateralibus distinctis, postico subremoto.

Ovate-oblong, slightly compressed, thin, subpellucid, glossy, pink or rosy orange, with narrow deeper-coloured rays, crowded with minute concentric striæ which become more distinct and elevated posteriorly; ventral margin slightly convex; anterior side the longer, obtusely rounded at its extremity, its dorsal edge scarcely at all declining; posterior extremity wedge-shaped, the ligamental edge nearly straight; ligament small but not sunken; fold and flexure not conspicuous; lateral teeth distinct, posterior the more distant.

Mediterranean.

20. *TELLINA DONACINA* (pl. lvi. f. 12. and pl. lxvi. f. 259.) *Lin.*, Sys. 1118; *Lin. Trans.* vol. viii. t. 1. f. 1.; *Mont. Test. Brit.* t. 27. f. 3; *Turt. Biv. Brit.* p. 103. t. 8. f. 4; *Wood, Gen. Conc.* t. 45. f. 5; *Philip, En. Mol. Sic.* vol. i. p. 24; *Lam. no. 27*; *Hanl. Des. Cat.* p. 64. t. 4. f. 31. *T. variegata Poli*, vol. i. t. 15. f. 10. *T. Llantivyi, Payr. Cat. Cors.* p. 40. t. 1. f. 13, 14.

*T. testâ oblongâ, solidiusculâ, subconvexâ, impolitâ, albido-flavescente, radiis roseo-rubris angustis interruptè ornatâ, striisque subimbricatis concentricè sulcatâ; margine ventrali convexiusculo, et anticè arcuato; margine dorsali roseo, anticè minimè posticè subito, declivi; latere antico latitudinem postici duplo superante; extremitate anticâ rotundatâ, posticâ obtusissimè cuneiformi; natibus radio brevi recto roseo strigatis; superficie internâ flavescente, propenates roseo-tinctâ; dentibus lateralibus validis, subæquidistantibus.*

Var. *Penitus candidâ.*

Oblong, rather solid, moderately convex, rather dull, pale yellow, with crimson interrupted narrow rays, and concentric subimbricated striæ; ventral edge moderately convex, swelling out anteriorly; dorsal edge rosy; beaks with a short direct rosy streak; anterior side thrice as long as the posterior, its extremity rounded, its dorsal edge nearly horizontal; posterior side very short, most obtusely cuneiform, inside tinged with yellow, becoming pink near the beaks, teeth strong, subequidistant.

Var. *Perfectly white.*

Britain, Europe.

21. *TELLINA TULIPA* (pl. lvi. f. 25.) *Hanley, Zool. Proc.* 1844.

*T. testâ ovali-oblongâ, solidâ, subinæquilaterali, compressâ, nitidiusculâ, lineis elevatis concentricè et confertim striatâ; albidâ aut albido-roseâ, radiis roseis multis angustis subinterruptè ornatâ; margine ventrali medio retuso; dorsali utrinque subrecto, anticè vix paululum declivi, posticè satis declivi; latere antico paulo lon-*

giore, ad extremitatem obtusè rotundato; postico truncato-cuneiformi; ligamento prominente; costâ umbonali subobsoletâ; dentibus ut in *Donacina*.

Oval-oblong, solid, slightly inequilateral, compressed, somewhat glossy, with very close concentric striæ, which are subimbricated in front, and raised behind; white or pale pink, with numerous rosy somewhat interrupted rays; ventral edge subretuse in the middle; dorsal edges nearly straight, the front one scarcely, the hinder one moderately sloping; ligament prominent; anterior side rather the longer, and obtusely rounded at its termination; posterior side of a truncated wedge-shape; umbonal ridge not prominent; inside paler than the exterior but usually tinged with rose-colour; teeth as in *Donacina*.

Mus. Cuming, Walton.

22. *TELLINA LINEATA* (pl. lvi. f. 35, 36. and pl. lvii. f. 46, 47.) *Turton*, Conch. Dict. p. 168. f. 16; *Turt. Biv. Brit.* p. 99. t. 7. f. 1. *T. Brasiliana* *Lam.* no. 46; *Hanl. Des. Cat.* p. 70. sup. t. 9. f. 3. *T. striata* *Mont. Test. Brit.* p. 60. t. 27. f. 2.

T. testâ ovatâ, solidâ, convexâ, concentricè et confertissimè striatâ; margine ventrali medio subrecto; dorsali anticè magis minusve convexo et paululum declivi, posticè umbones versus subretuso, deinde convexo et declivi; latere antico longiore, ad extremitatem rotundato; extremitate posticâ cuneiformi; ligamento prominente; flexurâ costâque umbonali satis conspicuis; dentibus lateralibus validis, subæquidistantibus.

Var. *a*, Testâ sordidè albidâ, umbonibus nonnunquam aurantiis, radioque brevi obliquo roseo anticè ornatis. Var. *b*, Penitus candidâ. Var. *c*, Ovato-oblongâ, lævigatâ, nitidâ, albido-roseâ, radio obliquo ut in var. *a*; intus roseâ.

More or less ovate solid and convex, with concentric minute crowded striæ; the ventral margin nearly straight in the middle; anterior side the longer (sometimes scarcely so,) its extremity rounded, its dorsal edge but slightly sloping; posterior extremity wedge-shaped, the ligamental edge, which near the beaks is somewhat retuse, becoming convex at its termination; fold and flexure inconspicuous; lateral teeth strong, and subequidistant.

Var. *a*, Pale, with a short oblique anterior crimson ray at the umbones, which are sometimes tinged with orange. Var. *b*, Entirely white. Var. *c*, The ray as in var. *a*, but the shape more elongated, and the surface pink smooth and glossy; inside rosy.

Britain (?), West Indies, Florida, and Brazil.



There being a previous *Brasiliana*, the subsequent name of Turton must be adopted.

23. *TELLINA GELIDA*, *Hanley*.

T. testâ ellipticâ, æquilaterali, solidiusculâ, subinæquivalvi, convexiusculâ, subnitidâ, intus extusque candidâ, lineis elevatis concentricis subconfertim striatâ, striis anticè et posticè elevationibus; margine ventrali convexo; dorsali utrinque subdeclivi, subrecto, anticè lamellis lanceolatis dentato; natibus haud incumbentibus; extremitate anticâ rotundatâ; posticâ subbiangulatâ, costâ umbonali distinctâ; ligamento infosso; dentibus lateralibus subæquidistantibus.

Elliptic, equilateral, slightly inequivalve, tolerably strong, moderately convex, scarcely glossy, white both within and without, with elevated and rather close concentric lines, which are stronger at the extremities, interstices quite smooth; ventral edge convex; dorsal but moderately sloping on either side, nearly straight, dentated in front by lanceolate lamellæ; beaks not inclining; front extremity rounded, hinder one somewhat biangulated; fold distinct; ligament sunken; lateral teeth nearly equidistant.

Mus. Belcher.

Unfortunately a figure of this distinct species cannot be given, as the possessor of the unique specimen is not in England.

24. *TELLINA SERRATA* (pl. lxxv. f. 256.) *Costa*, p. xvi. no. 8; Philop. En. Mol. Sic. p. 25; Ab. und Bes. Conch. part 5. t. 5 f. 5.

T. testâ ovali-trigonâ, solidiusculâ, satis convexâ, inæquilaterali, nitidiusculâ, intus extusque albidâ, (umbonibus plerumque flavis;) concentricè striatâ, striis exilibus, confertissimis, anticè posticè et infernè subelevatis; margine ventrali convexiusculo; dorsali anticè convexiusculo vixque declivi, postico subrecto et valdè declivi; latere antico longiore, ad extremitatem rotundato; posticè cuneiformi; costâ umbonali satis conspicuâ; natibus acutis; ligamento infosso; dentibus lateralibus, magnis, haud remotis, subæquidistantibus.

Subtriangularly oval, tolerably solid and convex, inequilateral, slightly glossy, within and without whitish, with the umbones usually bright yellow, most closely and delicately striated; the striæ raised at the extremities and towards the moderately convex ventral margin; front dorsal edge moderately convex and not much sloping, hinder one straightish and considerably sloping; front side the longer, its extremity rounded; hinder side wedge-shaped; fold

distinct; beaks acute; ligament sunken; lateral teeth large, tolerably and almost equally close.

Mediterranean.

25. *TELLINA OWENII* (pl. lx. f. 133.) *Hanley, Zool. Proc.* 1844.

*T. testâ* ovato-oblongâ, solidiusculâ, subimpolitâ, compressâ, æquilaterali, albidâ, concentricè et confertissimè striatâ; margine ventrali valdè arcuato; dorsali utrinque subdeclivi, anticè subrecto, posticè incurvato et lamellis subdentato; extremitate anticâ rotundatâ; latere postico acuminato, subrostrato; costâ umbonali conspicuâ; flexurâ satis distinctâ; natibus acutis; ligamento infosso; disco interno aurantio; dentibus lateralibus, subremotis, subæquidistantibus.

Ovate-oblong, tolerably strong, rather dull, whitish, (with often a tinge of orange in the front part of the umbones, and the internal disc always of that colour,) equilateral, compressed, with crowded concentric striæ; ventral edge much arcuated; dorsal moderately sloping on either side of the acute beaks, nearly straight in front, incurved behind and somewhat toothed by the lamellæ, (which in some specimens commence before the conspicuous fold); ligament sunken; lateral teeth distinct, and nearly equally remote.

Africa.

26. *TELLINA PHARAONIS* (pl. lxiii. f. 215.) *Hanley, Zool. Proc.* 1844.

*T. testâ* *T. Vulsellæ* simillimâ, sed solidâ lineisque elevatis concentricè striatâ, umbonibus aurantio-roseis; flexurâ sinuatâ.

Extremely like *T. Vulsella*, but solid, and rough with concentric elevated striæ; fold sinuated.

In the only specimen I have ever seen, one of the valves is of a delicate pink, the other white tinged with the same hue, the beaks of a very rosy orange and the ventral flexure so deep as to form a sinus; the lower margin is not so convex in front as in *Rostrata*; the front lateral tooth is distinctly crenated, but this is probably accidental.

Red Sea.

27. *TELLINA VULSELLA* (pl. lxi. f. 162, 163.) *Chem.* *T. rostrata*, *Gmel.* p. 3233 (in part); *Dil. Des. Cat.* p. 84; *Lam. no.* 9; *Chem. vol. vi.* f. 105; *Enc. Mèth. t.* 289. f. 1; *Wood, Gen. Conc. t.* 37. f. 3; *Knorr. vol. iv. t.* 2. f. 2, 5; *Hanl. Des. Cat.* p. 62. t. 4. f. 28.

*T. testâ* valdè elongatâ, compressâ, tenui, subpellucidâ, nitidis-

simâ, sublævigatâ, roseâ, radio pallidiore postico plerumque notatâ ; margine ventrali anticè arcuato, posticè flexuoso et sursum acclinato ; dorsali utrinque vix minimè declivi, prope nates acutas subretuso, deinde subrecto aut paululum convexiusculo ; latere antico longiore, ad extremitatem rotundato ; postico angusto, acuminato, rostrato ; ligamento infosso ; flexurâ costâque umbonali conspicuis ; dentibus lateralibus parvis, tenuibus, æquidistantibus.

Var. Flavo-aurantiâ.

Much elongated, compressed, thin, subpellucid, polished, rose-coloured, with usually a paler posterior ray, nearly smooth, or with minute radiating and concentric striæ ; ventral edge arcuated in front, flexuous and greatly elevated behind ; dorsal edge scarcely at all sloping in front, rather more so posteriorly, subretuse near the acute beaks, and then straightish or very slightly convex ; anterior side the longer, rounded at its extremity ; posterior side forming a narrow acuminate beak ; ligament sunken ; fold and flexure conspicuous ; lateral teeth thin, small, and equidistant.

Var. Rich yellow.

Yellow var. Isle of Zebu.

As this is not the *Rostrata* of Linnæus, I have adopted the other name proposed by Chemnitz "*Rostrata* seu *Vulsella*".

28. TELLINA PERNA (pl. lxiii. f. 202, 217, 219.) *Spengler*, *Schriivt. Naturhis. Gelstav. Kiobenha.* 4. (1798). *T. pallescens* *Dill. Des. Cat.* p. 84. *T. sulphurea* and *latirostra* *Lam.* no. 10, 11. *Hanl. Des. Cat.* p. 62. *T. incarnata* *Born* p. 36. t. 2. f. 12. (erroneously quoted as 11 in text). *T. rostrata flavescens* *Chem.* vol. vi. f. 104. *T. latirostra*, *Swain. Zool.* III. 2nd ser. vol. i. t. 20.

*T. testâ oblongo-elongatâ, tenuiusculâ, convexâ, subpellucidâ, nitidâ, sublævigatâ, albâ, flavâ, aurantiâ aut roseâ, radio pallidiore postico plerumque ornatâ ; margine ventrali anticè arcuato, posticè sursum declivi ; dorsali anticè vix declivi, convexiusculo, posticè paululum declivi, prope nates conspicuas subincurvato, mox convexiusculo ; latere antico longiore, subproducto ; postico rostrato ; extremitate posticâ obtusè angulatâ ; umbonibus subtumidis ; ligamento infosso ; margine cardinalis interno, angusto, callo ligamentali munito ; dentibus lateralibus tenuibus, inconspicuis, æquidistantibus.*

Elongated-oblong, rather thin, semitransparent, convex, glossy, very variable in colouring, being sulphur-yellow, white, pink with or without paler rays, orange with white rays, or orange flesh-coloured, &c., nearly smooth, often with obsolete radiating striulæ, which are more evident posteriorly ; ventral edge arcuated in front,

curving up posteriorly; anterior side rather the longer, its extremity obtusely rounded, scarcely any dorsal slope, but the edge convex; posterior side beaked, its dorsal edge moderately sloping and convex at its termination, its extremity obtusely subangulated; umbones rather tumid; ligament sunken; hinge-margin narrow, a callus near the teeth; lateral teeth thin, equidistant, indistinct.

Singapore, Isle of Burias, &c.

29. *TELLINA ALBINELLA* (pl. lxi. f. 164, 166.) *Lam.*, no. 17; *Hanl. Des. Cat.* p. 63. sup. t. 14. f. 3.

T. testâ oblongo-ovali, subæquilaterali, tenuiusculâ, complanatâ, nitidiusculâ, extus intusque albidâ; alterâ valvulâ sublevigatâ, alterius areâ posticâ concentricè striatâ; margine ventrali vix convexiusculo; dorsali anticè arcuato et declivi, posticè declivi et subincurvato; ligamento infosso; flexurâ subinconspicuâ; costâ umbonali carinatâ; dentibus lateralibus perparvis, inconspicuis, antico approximato. Var. *Roseâ*.

Oval-oblong, rather thin, flat, subequilateral, slightly glossy, whitish, (usually with a fulvous stain towards the beaks,) nearly smooth, except on the posterior half of one of the valves which is deeply and distinctly striated concentrically; ventral edge nearly straight in the middle and rising behind; front dorsal edge arched and deeply sloping; posterior side acuminate, angulated below, and slightly beaked, the ligamental edge moderately sloping, and rather incurved; ligament sunken; inside whitish, the lateral teeth very small, indistinct, the anterior one closely approximate.

Var. *Rose-coloured*.

Australia.

30. *TELLINA ROSEA* (pl. lxi. f. 170) *Spengler*, *Schriv. Natur. Gelsta. Kioben.* vol. 4. 1798; T. pallidè rosea, *Chem.* vol. 6. f. 96.

T. testâ oblongâ, crassissimâ, subæquilaterali, convexiusculâ, nitidâ, roseâ, sublevigatâ, striis concentricis tenuissimis, lineisque radiantibus obsoletis tantum signatâ; striis posticis prope nates acutas remotis, subelevatis; margine ventrali convexo, posticè acclivi; dorsali utrinque declivi, anticè convexo, posticè subrecto plerumque subincurvato; latere postico subcuneiformi; extremitate posticâ subacuminatâ; costâ umbonali angustâ; flexurâ inconspicuâ; ligamento infosso; superficie internâ roseâ, politâ, impressionibus muscularibus fortiter impressis; margine cardinali intus lato, valido; dentibus lateralibus parvis, subæquidistantibus, ætate obsoletis.

Oblong, very solid, subequilateral, rather convex, glossy, pink,



with delicate concentric and obsolete radiating striæ, the posterior concentric more distant raised and distinct near the beaks; ventral edge scarcely arcuated, ascending posteriorly; anterior side rounded, its dorsal slope strong; posterior side wedge-shaped, ligamental edge nearly straight, often slightly incurved, moderately sloping, point acuminate; within rosy, polished, scars deeply impressed; hinge margin broad and very strong; lateral teeth subequidistant, rather small, by age obsolete.

Indian Ocean (?).

31. *TELLINA INÆQUISTRIATA* (pl. lvii. f. 58. and pl. lviii. f. 80.) *Donovan*, Brit. Shells, (1802), vol. 4. t. 123; *T. sanguinea*, *Wood*, Gen. Conch. p. 159. t. 44. f. 2; *Hanl. Desc. Cat.* p. 67. t. 4. f. 27.

*T. testâ oblongo-subtrigonâ, solidiusculâ, subæquilaterali, nitidâ, compressiusculâ, pallidè rubro-sanguineâ, concentricè confertim et exilissimè striatâ; striis posticis alterâ in valvulâ remotis, rudioribus; margine ventrali subrecto; dorsali anticè convexiusculo et subdeclivi, posticè declivi et prope nates retuso; latere antico paulo longiore, ad extremitatem rotundato; postico truncato-cuneiformi; colore interno saturatiore; ligamento prominulo; flexurâ costâque umbonali obsoletis; dentibus lateralibus magnis, antico approximato, postico haud remoto.*

*Var. a*, striis posticis in utrâque valvulâ remotis, rudioribus.

*Var. b*, testâ albidâ, pallidè aurantio ad nates utrinque radiatâ.

Oblong, very slightly triangular, rather solid, somewhat compressed; glossy, subequilateral, of a pale blood red, with fine and crowded concentric striæ, which however in one of the valves are posteriorly replaced by coarser and more distant ones; ventral edge nearly straight; anterior side rather the longer, its end rounded, its dorsal slope moderate and tolerably convex; posterior end truncated-cuneiform, its dorsal slope strong, nearly straight, or somewhat concave near its acute beaks; ligament but slightly projecting; fold and flexure obsolete; internal colours deeper; lateral teeth large, the posterior not very distant, the anterior subapproximate.

*Var. a*, the posterior striæ distant in both valves. *Var. b*, white, with a short pale orange ray on either side of the beaks.

In sculpture resembling *Nitida*.

Bay of Guayaquil; (Cuming).

32. *TELLINA PRINCEPS* (pl. lxiii. f. 206.) *Hanley*, Zool. Proc. 1844.

*T. testâ oblongo-ellipticâ, æquilaterali, solidâ, compressâ, nitidiusculâ, intus extusque roseo-purpurascente, concentricè sulcatâ; striis exilibus, profundis, radiantibus, sulcos confertos, utrinque (et*

alterâ in valvulâ undique) decussantibus; margine ventrali subrecto; dorsali utrinque leviter et æqualiter subdeclivi; extremitate posticâ obtusissimè angulatâ; flexurâ ventrali costâque umbonali, obsoletis; ligamento prominente; dente laterali antico approximato et conspicuo, postico parvo, remoto, inconspicuo.

Oblong elliptic, equilateral, solid, compressed, rather glossy, both internally and externally of an uniform reddish lilac colour, the surface decussated by close-set concentric sulci and fine but very distinct radiating striæ, which are only visible at the extreme sides in one of the valves; the ventral edge nearly straight; the dorsal slopes gentle and all but equal; the posterior end most obtusely angulated; umbonal ridge and flexure obsolete; the anterior lateral tooth extremely close and distinct, the posterior very distant and inconspicuous.

Not readily confused with any in this division, but very closely allied to *Purpurascens*, from which the teeth distinguish it.

Tumbez, Peru; (Cuming).

33. *TELLINA PUNICEA* (pl. lviii. f. 89. and pl. lx. f. 154.)  
*Born*, p. 33. t. 2. f. 2; *Lam.* no. 21; *Enc. Mèth.* t. 291. f. 2;  
*Gmel.* 3239; *Dil. Des. Cat.* p. 90.

T. testâ ovali-trigonâ, solidâ, convexiusculâ, subæquilaterali, nitidâ, extus intusque albido-roseâ, (rarius candidâ) prope nates albas colore saturatius tinctâ; concentricè sulcatâ, sulcis confertis, nonnunquam alterâ in valvulâ posticè obsoletis; margine ventrali convexiusculo; dorsali utrinque declivi, anticè convexiusculo, posticè subrecto; extremitate anticâ obtusâ, et supernè subemarginatâ; latere postico truncato-cuneiformi: flexurâ costâque umbonali inconspicuis; ligamento prominulo aut prominente; dentibus lateralibus distinctis, antico valdè approximato, postico remoto.

Var.? *Magis* trigonâ, tenuiore, saturatius pictâ, sulcis alterius valvulæ posticè obsoletissimis, emarginatione subobsoletâ.

Subtriangularly oval, solid, moderately convex, nearly equilateral, glossy, of a pale rose-colour, increasing in intensity near the white-tipped beaks; surface closely and deeply grooved (the sulci rarely obsolete behind); ventral edge slightly convex; anterior side (if either) the shorter, the extremity obtusely emarginated or indented near the dorsal slope, which is slight and rather convex; posterior side of a truncate wedge shape, its dorsal edge nearly straight and much sloping; fold and flexure obsolete; ligament always more or less prominent; lateral teeth distinct, the front one approximate, the hinder remote.

Var.? more triangular, thinner, deeper coloured; the sulci pos-

teriorly quite obsolete in one of the valves; emargination almost obsolete.

Xipixapi, W. Columbia, in sandy mud, 10 fathoms (Cuming); and Trinidad, W. Indies; Britain (?).

Easily distinguished from *Striata*, by its closer and more delicate sulci, its less prominent beaks, and the absence of all radiation. It is also thicker and more opaque, and remarkable for the slight indentation which terminates the rather flattened space adjacent to the front dorsal edge, a character which is not possessed by any of the allied species.

34. *TELLINA STRIATA* (pl. lxi. f. 161.) *Chemn.*, vol. x. p. 349. f. 1654-5; *T. angulosa*, *Gmel.* 3244; *T. læta*, *Montagu*, Test. Br. p. 57; *T. punicea*, in part, *Turt. Dic.*; *Donax Martinicensis. Lam.* (fide Deles. Rec. t. 6. f. 15.)

*T. testâ* ovali-subtrigonâ, solidiusculâ, subpellucidâ, convexusculâ, nitidâ, aut albido-roseâ radio roseo utrinque ornatâ, aut albidâ radio flavescente; concentricè sulcatâ, sulcis remotis, alterâ in valvulâ posticè evanescentibus; margine ventrali paululum convexusculo; dorsali utrinque declivi, anticè convexusculo, posticè subrecto; latere antico longiore, postico truncato-cuneiformi; extremitate anticâ simplici, rotundatâ; flexurâ costâque umbonali inconspicuis; natibus acutis, pallidis; ligamento prominente; dentibus ut in *Puniceâ*.

Subangularly oval, moderately solid and convex, either pale pink with a roseate ray down the obsolete umbonal ridge (preceded by a paler streak) and a short roseate ray in front of the acute and prominent beaks, or white with the rays yellowish; surface grooved by subimbricated distant sulci, which disappear on one of the valves at the truncate wedge-shaped hinder extremity; ventral edge but slightly convex; anterior side the longer, its extremity simply rounded and never indented, its dorsal edge but moderately sloping and slightly convex; hinder dorsal edge sloping and nearly straight; flexure nearly obsolete; teeth as in *Punicea*.

W. Indies; Britain (?).

The rays are never absent, and the anterior side is always the longer. Mr. Sowerby informs me, that this is the *Tellinides rosacea* of King (*Zool. Journ.* vol. 5.), which is too briefly defined for recognition.

*TELLINA REGIA* (pl. lx. f. 140.) *Hanley*, *Zool. Proc.* 1844.

*T. testâ* oblongâ, tenui, compressiusculâ, subinæquivalvi, subæquilaterali, nitidissimâ, pellucidâ, intus extusque roseo-purpurascens.

cente; concentricè sulcatâ, sulcis remotis, alterâ in valvulâ posticè evanescentibus; margine ventrali subrecto, medio subretuso; dorsali utrinque subæqualiter declivi, posticè subrecto; latere antico paululum brevior, ad extremitatem obtusè rotundato; extremitate posticâ supernè angulatâ, attenuatâ; costâ umbonali et flexurâ ventrali obsoletis; ligamento prominulo; dentibus ut in *Puniceâ*.

Oblong, thin, rather compressed, almost inequivalve, subequilateral; extremely glossy, both externally and internally of a deep subpellucid purplish crimson; the surface marked with distant concentric grooves, which posteriorly become obsolete in one or both of the valves; the ventral edge nearly straight, subretuse in the middle; anterior side slightly the shorter, its extremity obtusely rounded; posterior extremity almost biangulated; dorsal moderately and almost equally sloping on either side of the beaks, nearly straight posteriorly; umbonal ridge and flexure nearly obsolete; the ligament rather prominent; teeth as in *Punicea*.

Most closely allied to *Punicea*, but its deep purplish red, and its more distant sulci suffice to distinguish it. From *Princeps* it differs by the absence of radiating striæ; from *Striata*, by its slightly longer posterior side; from *Rubescens*, by its colouring, and the lesser slope of the dorsal edges.

Real Lleijs, Central America.

36. *TELLINA EBURNEA* (pl. lvii. f. 91.) *Hanley*, Zool. Proc. 1844.

T. testâ oblongâ, opacâ, solidâ, inæquivalvi, convexâ, nitidâ, albidâ, inæquilaterali; concentricè sulcatâ, sulcis profundis, remotis, (alterâ in valvulâ, nonnunquam posticè evanescentibus); margine ventrali convexiusculo, anticè sursum acclinato; dorsali anticè subrecto, leviterque declivi, posticè recto subitoque declivi; latere postico multum brevior, subcuneiformi; lineis erectis obliquis aream nymphalem et analem rugantibus; ligamento brevi, prominente; flexurâ ventrali costâque umbonali subobsoletis; superficie internâ candidâ; dentibus lateralibus, ut in *Puniceâ*.

Oblong, solid, opaque, rather inequivalve, convex, whitish, glossy, clearly inequilateral, with strong deep concentric sulci, which usually become obsolete in one of the valves, and which diverge and become elevated on passing the flattened space at the upper edge of the more convex valve; ventral edge very slightly convex, curving obliquely upward anteriorly; posterior side much the shorter, subcuneiform; the ligamental edge straight, and abruptly sloping; ligament short and prominent; fold and umbonal ridge almost obsolete; inside pure white, teeth as in *Punicea*.



The peculiar elevated sulci on the dorsal areas, at once distinguish it from all the allied species.

Tumbez, Peru.

37. *TELLINA ALTERNATA* (pl. lxi. f. 159.) Say, Jour. Ac. Phil. vol. ii. p. 275; Amer. Conch. t. 65. f. 1; Hanl. Des. Cat. p. 66. sup. t. 14. f. 9.

T. testâ oblongo-elongatâ, solidiusculâ, nitidâ, compressiusculâ, albâ aut albo-flavescente, (intus flavâ); concentricè sulcatâ, sulcis remotis, profundis, ad costam umbonalem obsoletissimam alternatim evanescentibus; margine ventrali subrecto; dorsali anticè declivi convexiusculo, posticè recto et multum declivi; latere postico manifestè longiore, ad extremitatem rotundato; antico cuneiformi; ligamento prominente; flexurâ inconspicuâ; dentibus iisdem ut in *Puniceâ*.

Elongated-oblong, rather solid, and somewhat compressed, of a glossy opaque white or yellowish white, grooved concentrically with rather distant deeply impressed sulci, which alternately disappear in crossing the nearly obsolete umbonal ridge; ventral edge nearly straight; anterior side much the longer, rounded at its extremity, its dorsal edge moderately sloping in a convex line; posterior side cuneiform, its dorsal line being straight and greatly sloping; ligament prominent; fold indistinct; inside white, the teeth as in *Punicea*.

In the only specimen I have ever seen of this shell, the striæ are closer in one valve than in the other. In general appearance the shell is extremely like *Striata*.

South Carolina.

38. *TELLINA RUBESCENS* (pl. lx. f. 153.) Hanley, Zool. Proc. 1844.

T. testâ *T. Striata* et *Punicea* simillimâ, ab hâc autem differt, testâ tenuiore anticæ emarginationis experte, ab illâ natibus obtusioribus et extremitate posticâ minus attenuatâ; ab utrâque, superficie nitidissimâ, ligamento infosso, margineque dorsali convexiore et utrinque subæqualiter declivi; sulcis in utrâque valvulâ posticè obsoletis; dentibus ut in *Puniceâ*, sed minimis, inconspicuis.

Most closely allied to *Striata* and *Punicea*, but differing from the former by the greater obtuseness of its beaks, and the lesser attenuation of its hinder extremity; from the latter by its more delicate texture and the absence of any anterior emargination; from both, in the sunken ligament, the greater convexity and more equal slope of the dorsal edge. The sulci are obsolete posteriorly

in both the valves, and the whole surface is peculiarly glossy; the teeth are as in *Punicea*, but very small and indistinct.

Tumbez and Panama (Cuming).

39. *TELLINA PRORA* (pl. lx. f. 152.) *Hanley*, Zool. Proc. 1844.

T. testâ subtrigonâ, ovali, solidâ, convexiusculâ, subæquilaterali, nitidâ, extus intusque pallidè roseâ; aut sublævigatâ, aut concentricè et tenuissimè striatâ; margine ventrali convexo; dorsali utrinque valdè et subæqualiter declivi, subrecto; extremitate posticâ acuminatâ; flexurâ ventrali costâque umbonali subobsoletis; ligamento prominulo; dentibus lateralibus magnis, antico approximato.

Subtriangular, oval, tolerably convex, solid, glossy, nearly equilateral, uniform pink both within and without, becoming deeper towards the beaks, most delicately and regularly striated concentrically; ventral edge convex; dorsal edges nearly equally sloping, slopes strong and scarcely at all convex; posterior end acuminate; fold and flexure nearly obsolete; ligament but little prominent, both slopes being slightly excavated; lateral teeth large, the anterior approximate.

Porto St. Elena, and Salango, West Columbia.

40. *TELLINA LACERIDENS* (pl. lxi. f. 168 and 176. and pl. lxvi. f. 258.) *Hanley*, Zool. Proc. 1844.

T. testâ oblongo-subtrigonâ, solidâ, opacâ, subæquilaterali, nitidissimâ, convexiusculâ, albâ (intus candidâ), supernè lævigatâ, infernè concentricè et confertim striatâ; margine ventrali convexiusculo; dorsali utrinque convexiusculo, et subæqualiter declivi; extremitate anticâ rotundatâ (plerumque subattenuatâ), posticâ rotundato-acuminatâ; costâ umbonali et flexurâ ventrali inconspicuis; ligamento magno, elongato, prominente; dentibus primariis laceratis, antico laterali subapproximato, postico laterali minore, remoto.

Var. Testâ magis trigonâ, undique sulcis confertis excavatâ.

Oblong subtriangular, solid, subequilateral, of an extremely glossy enamel-like opaque white surface, which is smooth near the beaks, and grooved closely towards the but slightly convex ventral margin; dorsal line nearly equally sloping on each side, the edges very slightly convex; anterior extremity rounded (and in the typical examples rather attenuated), posterior end obtusely acuminate; fold and umbonal ridge obsolete; ligament large, elongated, and prominent; inside white; the primary teeth minutely jagged, and

one of them rather large, anterior lateral rather approximate, posterior lateral smaller and distant.

Tumbez, Peru.

Var. More triangular, the close concentric sulci occupying the entire surface. Chiriqui, West Columbia.

Its extraordinary teeth, large and elongated ligament, and either smooth or *closely* sulcated surface, suffice for its distinguishment.

41. *TELLINA MADAGASCARIENSIS* (pl. lxiii. f. 218.) *Gmelin*, 3237; Wood Gen. Conch. 169. t. 39. f. 2, 3; List. 386. f. 233; *T. rosea*, *Lam.* no. 14; *Hanl. Des. Cat.* p. 63. t. 4. f. 46.

*T. testâ* ovatâ, crassissimâ, convexâ, subimpolitâ, pallidè roseâ, lævigatâ; margine ventrali vix convexiusculo; dorsali utrinque valde declivi; costâ umbonali latâ, obtusâ; latere antico manifestè brevior, postico subcuneiformi; extremitate anticâ obtusâ; superficie internâ roseâ, margine cardinali latissimo; dentibus lateralibus subobsoletis, parvis, antico approximato, postico remoto; impressionibus muscularibus fortiter impressis.

Ovate, very thick, convex, rather dull, darker or paler pink, smooth, ventral edge but little convex; anterior side somewhat the shorter, its extremity rounded, its slope moderate; posterior side subcuneiform, its extremity obtuse, its dorsal edge much sloping and slightly convex; umbonal ridge very obtuse; ligament prominent; inside rosy, scars deeply impressed; hinge-margin very broad; lateral teeth subobsolete, small, anterior one approximate, posterior distant.

Madagascar.

The figure in Lister is referred to by Spengler for his *T. rudis*, but neither the locality he gives, nor the expression "with coarse transverse striæ," will apply to this species.

42. *TELLINA TONGANA* (pl. lxiii. f. 209.) *Quoy and Gaimard*, *Astrolabe Zool.* vol. iii. p. 498. t. 81. f. 11, 12, 13.

*T. testâ* oblongâ, solidâ, subpellucidâ, subæquivalvi, convexâ, subæquilaterali, nitidâ, sublævigatâ, albâ (intus albidâ), roseo ad nates radiatâ, eodemque colore ad laterum extremitates ornatissimè pictâ; margine ventrali subarcuato, posticè sursum acclivi; dorsali anticè vix declivi, posticè leviter declivi convexo; latere postico paululum brevior, attenuato, subrostrato; flexurâ ventrali valde conspicuâ; costâ umbonali prominente; umbonibus tumidis; ligamento infosso; dentibus lateralibus haud magnis, subæquidistantibus.

Oblong, solid, subequivalve, convex, subequilateral, rather pel-

lucid, nearly smooth, glossy, white, the beaks rayed with rose-colour, the extremities of the sides pink; ventral edge subarcuated, ascending posteriorly; anterior side very slightly the longer, its dorsal edge scarcely sloping; posterior edge attenuated and somewhat beaked, its dorsal side convex and moderately sloping; the flexure and umbonal ridge very conspicuous; umbones tumid; ligament sunken; inside whitish, a ligamental callus, and rather small and nearly equidistant lateral teeth.

Tonga.

43. *TELLINA ELEGANS* (pl. lxxv. f. 241.) *Gray* in *Wood's Ind. Test. sup. t. 1. f. 5*; *Hanl. Des. Cat. p. 62. t. 1. f. 5*.

*T. testâ oblongo-elongatâ, valdè tortuosâ, subinæquivalvi, subæquilaterali, solidâ, politâ, subventricosâ, lævigatâ; niveâ, (intus albidâ) roseo radiatâ, radiis latis versus marginem ventralem arcuatam et posticè acclinatam evanescentibus; margine dorsali anticè convexiusculo et vix declivi, posticè leviter declivi et prope nates roseas subincurvato deinde convexo; latere postico paululum longiore, attenuato, leviter subrostrato; extremitate posticâ rotundato-angulatâ; ligamento brevi, pergrandi, prominente; costâ umbonali obsolete; dentibus parvis, antico subapproximato.*

Twisted, elongated-oblong, solid, rather inequivalve, subequilateral, subventricose, smooth, highly polished, white with broad rosy rays, which disappear towards the arcuated and posteriorly ascending ventral margin; extremity of the anterior side rounded, its dorsal edge but slightly sloping; posterior side very slightly the longer, attenuated, obtuse at the extremity; umbonal ridge quite obsolete; ligament peculiarly large, short, and prominent; inside white, the lateral teeth small and rather approximate.

Gulf of Mexico.

44. *TELLINA RADIATA* (pl. lxxiii. f. 220, 221.) *Lin. Syst. 1117*; *Lam. no. 1*; *Chem. 6. f. 102*; *Wood, Gen. Con. t. 38. f. 2, 3*; *Ency. Mèt. t. 289. f. 2, 3*; *Hanl. Des. Cat. p. 61. t. 4. f. 26*; *Knorr. vol. iv. t. 2. f. 2, 4*; *T. unimaculata, Lam. no. 2.*

*T. testâ oblongo-elongatâ, subinæquilaterali, haud tortuosâ, subventricosâ, solidâ, lævi, politâ, albâ, (intus flavescens) radiis roseis latis plerumque ornatâ; margine ventrali vix convexiusculo; dorsali anticè vix declivi, posticè subrecto et leviter declivi; extremitate lateris antici longioris rotundatâ, lateris postici subattenuatâ, obtusè angulatâ; ligamento brevi, magno, prominente; costâ umbonali obsolete; flexurâ ventrali conspicuâ; lunulâ distinctâ, angusto-lanceolatâ; dentibus lateralibus validis, subequidistantibus.*



Var. testâ radiorum experte; natibus roseis.

Elongated-oblong, more or less ventricose, solid, not twisted, of a highly polished smooth white, with zones of very pale yellow, and generally with broad rosy rays; ventral margin scarcely convex; anterior side rather the longer, its dorsal edge scarcely sloping, its extremity rounded; posterior side slightly attenuated, its extremity obtusely subangulated, its dorsal edge nearly straight and but slightly sloping; ligament short, large, and prominent; lunule distinct, elongated-lanceolate; inside yellowish; lateral teeth strong and nearly equidistant.

West Indies.

45. *TELLINA BRASILIANA* (pl. lxii. f. 179.) *Spengler*, *Skriv. Nat. Selskab. Kiobenh.* 1798; *T. semizonalis*, *Lam.* no. 3; *Deles.* t. 6. f. 1; *Hanl. Des. Cat.* p. 61. sup. t. 11. f. 60.

*T. testâ oblongo-elongatâ, inæquilaterali, solidâ, convexiusculâ, nitidâ, pallidè roseo-violaccâ, lævigatâ; margine ventrali subrecto; dorsali anticè vix declivi et paululum convexiusculo, posticè declivi et subrecto; latere antico longiore, producto; extremitate posticâ obtusè angulatâ; costâ umbonali obtusâ; lunulâ lanceolatâ angustâ; superficie internâ roseo-purpurascente, radiis duobus pallidioribus aut albis ad extremitatem posticam ornatâ; dentibus lateralibus remotis, postico parvo.*

Elongated-oblong, inequilateral, solid, slightly convex, glossy, pale lilac, smooth; ventral margin nearly straight, slightly ascending in front, its flexure distinct; the umbonal ridge obtuse; anterior side much the longer, its dorsal slope very gentle; posterior extremity obtusely angulated, the dorsal edge nearly straight and moderately sloping; a narrow lanceolate lunule; the inside of a purplish crimson with two pale or white rays at the posterior extremity; teeth remote, equidistant, the posterior one small and rather indistinct.

Brazil (fide *Spengler*).

46. *TELLINA PUDICA* (pl. lvi. f. 7.) *Hanley*, *Zool. Proc.* 1844.

*T. testâ parvâ, solidâ, ovato-subtrigonâ, subæquilaterali, nitidâ, candidâ, sublævigatâ, tenuissimè concentricè striatâ; margine ventrali anticè arcuato, posticè subito sursum acclinato; dorsali utrinque valdè declivi, anticè convexo, posticè elongato et subrecto; latere antico paululum brevior, subventricosus, rotundatus; postico compresso, rostrato; extremitate posticâ subacuminatâ; natibus prominentibus; flexurâ ventrali costâque umbonali subinconspi-*

cuis; ligamento minimo, infosso; superficie internâ politâ; dentibus lateralibus distinctis, subapproximatis, subæquidistantibus.

Small, ovate, subtrigonal, nearly equilateral but rather longer posteriorly, rather ventricose in front but compressed at the posterior end, tolerably thick, of a very glossy pure uniform white, with scarcely impressed concentric striæ; the ventral edge bulging out towards the rounder anterior extremity, but rising in rather a concave line towards the posterior end, which is strongly beaked and has the tips rounded but much attenuated; front dorsal edge convex and strongly sloping, ligamental edge elongated, nearly straight and strongly sloping; beaks prominent; umbonal ridge and fold not conspicuous; ligament sunken and minute; inside polished, the lateral teeth distinct and nearly equally subapproximate.

Catbalonga, Isle of Samar.

47. *TELLINA SOWERBII* (pl. lxiii. f. 205.) *Hanley*, Zool. Proc. 1844.

T. testâ subellipticâ, subæquivalvi, tenui, compressâ, lævigatâ, politâ, candidâ; margine ventrali arcuato, posticè sursum acclinato; dorsali anticè vix paululum declivi, convexiusculo, posticè paululum declivi et prope nates subincurvato, deinde convexo; latere antico longiore, subproducto; postico rotundato-acuminato; ligamento parvo, angustissimo, infosso; flexurâ ventrali costâque umbonali subinconspicuis; superficie internâ albidâ, plerumque aurantio tinctâ; dentibus lateralibus tenuibus, subæquidistantibus.

Nearly elliptical, subinequivalve, compressed, highly polished, of an uniform smooth white (in some specimens with a tinge of rosy orange which increases in intensity towards the beaks); ventral edge arcuated, and rising at the posterior extremity; anterior side decidedly the longer, its extremity rounded, its dorsal edge nearly horizontal; posterior side attenuated, but rounded at its termination, its dorsal edge a little sloping at first, slightly incurved near the beaks, and then decidedly convex; ligament sunken, and very narrow; inside usually tinged with orange; lateral teeth thin, and nearly equidistant.

Australia.

48. *TELLINA LATA* (pl. lxiv. f. 237.) *Quoy et Gai*. Astrol. Zool. vol. 3. p. 497. t. 81. f. 8, 9, 10; Lam. 2nd. ed. vol. 6. p. 108; Hanl. Des. Cat. p. 71. sup. t. 14. f. 13.

T. testâ subovali, inæquilaterali, solidâ, subæquivalvi, compressiusculâ, nitidâ, albâ, sublævigatâ, rubro eleganter radiatâ; radiis

interruptis; margine ventrali convexo, utrinque (maximè autem posticè) sursum acclinato; dorsali posticè valdè declivi prope umbones subincurvato moxque subrecto, anticè convexiusculo et paulo declivi; latere postico brevi, acuminato; antico producto, ad extremitatem rotundato-obtuso; natibus acutis, rubro-roseis; ligamento infosso; superficie internâ albâ aut flavescente; dentibus lateralibus modicis, haud remotis.

Large, suboval, subequivalve, inequilateral, strong, rather compressed, nearly smooth or marked with concentric striulæ; of a glossy white with brilliant rays of a rosy red; ventral edge convex, rising at each extremity, but more particularly so at the posterior end which is short and acuminate; anterior side produced, its extremity obtusely rounded, its dorsal edge but slightly convex and little sloping; posterior dorsal edge greatly sloping, somewhat incurved near the rather acute beaks which are always rosy-red, and then nearly straight or but slightly convex; ligament sunken; inside usually tinged with yellow, lateral teeth moderately large and distant.

South Seas.

49. *TELLINA CHLOROLEUCA* (pl. lxiii. f. 208, 210.) *Lam.* no. 15; *Rumphius* t. 45. f. 1.

T. testâ ovatâ, subtenui, convexâ, nitidâ, albidâ aut albidoflavescente, radiis multis angustis pallidè roseis ornatâ, sublævigatâ, (lineis obsoletis radiantibus sæpe versus marginem ventralem strias concentricas confertissimas decussantibus); margine ventrali arcuato, posticè sursum acclivi; dorsali anticè convexo aut convexiusculo satisque declivi, posticè satis brevi convexiusculo et valdè declivi; latere antico longiore, ad extremitatem rotundato; postico brevi, acuminato; natibus roseis, prominulis; costâ umbonali et flexurâ ventrali conspicuis; ligamento angusto infosso; superficie internâ albidoflavescente; dentibus lateralibus, distinctis, subæquidistantibus.

Var. Radiis albidis et rubro-aurantiis pictâ; natibus vix roseis.

Ovate, convex, rather thin, of a glossy yellowish white, with numerous interrupted narrow rays of a pale rose colour, nearly smooth, (often decussated towards the arcuated and posteriorly rising ventral margin with concentric striulæ and obsolete radiating lines); anterior side the longer, its extremity rounded, its dorsal edge convex and moderately sloping; posterior side acuminate, very slightly beaked and rather short, the dorsal edge but slightly convex and much sloping; beaks of a deep rose-colour and rather prominent; ligament narrow and sunken; umbonal ridge and

flexure distinct; inside yellowish white; lateral teeth distinct and nearly equidistant.

Var. Rayed with orange-red and white; beaks but slightly if at all rosy.

Isle of Negros, Philippines (Cuming).

50. *TELLINA LÆVIGATA* (pl. lxiv. f. 225, 227.) *Lin. Sys.* 1117; *Lin. Mus. Ulr.* 480; *Schroet. einl. t.* 7. f. 10; *List. t.* 387. f. 234; *Lam. no.* 36; *Hanl. Des. Cat.* p. 68.

T. testâ ovato-rotundatâ, solidâ, subæquilaterali, nitidâ, convexâ, aut subventricosâ, sublævigatâ; margine ventrali anticè arcuato, posticè sursum acclinato; dorsali, anticè subdeclivi magis minusve convexo, posticè declivi et supernè subretuso aut subrecto et infernè convexo; latere antico paululum longiore, rotundato, dilatato; postico magis minusve angulato; natibus prominentibus; pube striis lamellosis rugosâ; ligamento infosso; flexurâ costâque umbonali conspicuis; cardine, dentibus lateralibus validis, subap-proximalis, subæquidistantibus.

Var. *a.* Subalbidâ, radiis roseo-aurantiis ornatâ. Var. *b.* (T. concinna, *Phil. Ab. und Bes. Conch. part.* 5. t. 5. f. 1.) Albidâ, marginibus intus extusque rubro-aurantiis.

Rounded-ovate, solid, subequilateral, glossy, convex or subventricose, nearly smooth (there are obsolete crowded radiating lines, and frequently but not always minute very close raised concentric striulæ towards the lower margin and at either extremity); ventral edge arcuated in front, greatly rising behind; anterior side rather the longer, rounded and dilated, its dorsal edge more or less convex and not much sloping; posterior side more or less angulated, its dorsal edge sloping and nearly straight or slightly retuse above, but convex at its termination; beaks prominent; ligament sunken; fold and flexure conspicuous; lateral teeth strong, subapproximate, subequidistant.

Var. *a.* Whitish, or flesh-coloured with rosy orange rays. Var. *b.* White with the edges alone of a bright orange red, and the umbones and interior usually tinged with yellow.

An extremely variable species, with the beaks usually worn at the touching point.

St. Thomas, West Indies.

51. *TELLINA SEMEN* (pl. lvi. f. 8,) *Hanley, Zool. Proc.* 1844.

T. testâ ovali, crassâ, inæquilaterali, subventricosâ, nitidâ, albidâ (intus submargaritaceâ), anticè rotundatâ, posticè obtusâ; concentricè striatâ, striis anticè subimbricatis confertissimisque, posticè



remotioribus et elevatis; margine ventrali convexo; dorsali utrinque convexo aut convexiusculo, anticè subdeclivi, posticè declivi; latere antico multo longiore; natibus obtusis; ligamento minimo, prominulo; lunulâ angustissimâ; costâ umbonali nullâ, flexurâ subobsoletâ; dentibus lateralibus conspicuis, postico magis approximato.

Var. Ovatâ aut obovatâ, margine dorsali utrinque magis declivi.

Oval, thick, inequilateral, subventricose, glossy, whitish, with concentric striæ, which in front are crowded and subimbricated, but behind are rather distant and elevated; ventral edge convex; dorsal edges more or less convex, the hinder one sloping, the front one but moderately so, anterior side much the longer, rounded (and sometimes attenuated) at its extremity; posterior extremity obtuse; ligament very small and rather prominent; a very narrow lunule; beaks obtuse; flexure nearly obsolete; inside subnacreous; lateral teeth distinct, the hinder much the closer.

Var. Ovate or obovate, the dorsal edges more sloping.

Were it not for the slight fold, it might easily be mistaken for a *Donax*.

52. *TELLINA BIMACULATA* (pl. lvi. f. 16, 19, 20, 21, 22.) *Lin.*, Sys. 1120; Chem. vol. vi. f. 127, 132. Dillwyn. D. Cat. p. 101. Encyc. Méth. t. 290. f. 9, 10. Donovan, Brit. Shells, t. 19. f. 1. Turt. Biv. Brit. t. 8. f. 5; Lam. no. 52; Hanl. Des. Cat. p. 71. t. 4. f. 83; *T. sexradiata* Lam. no. 53.; Hanl. Des. Cat. p. 71. sup. t. 11. f. 37.

*T. testâ* ovatâ aut ovato-rotundatâ, crassâ, convexâ, nitidiusculâ, lævigatâ, variis coloribus pictâ; margine ventrali convexo aut arcuato (sæpe posticè paululum subincurvato); dorsali utrinque paululum convexiusculo, anticè valde declivi, posticè brevi leviterque declivi; latere antico longiore, attenuato, ad extremitatem rotundato; postico brevi, obtusè biangulato; costâ umbonali et flexurâ ventrali obsoletis; ligamento brevi, prominente; natibus acutis, nymphis prominentibus, incumbentibus; dentibus primariis permagnis; lateralibus brevibus, crassis, subæquidistantibus, (plerumque obsoletis).

Varying in shape from ovate to rounded ovate; thick, convex, slightly glossy, smooth; ventral edge varying from convex to arcuated, often slightly incurved posteriorly; hinder side much the shorter, obtusely biangulated, its dorsal edge very short and but slightly sloping; anterior side much attenuated, its extremity rounded, its dorsal edge much sloping and little convex, beaks inclined; ligament short but very prominent; primary teeth large,

the lateral (which however are usually obsolete), short, thick, and nearly equidistant.

The varieties in colouring are too numerous to specify, the principal however, are as follows; violet, orange-red, white, yellow or pinkish red, (either uniform, or rayed with purple, the white specimens with usually two lateral crimson internal spots); whitish or yellowish with narrow interrupted violet rays often assuming the appearance of arrow-heads; violet, rayed with white; whitish, with broad fawn-coloured and narrower purplish rays.

Britain, and West Indies.

53. *TELLINA LUCINOIDES* (pl. lvi. f. 32.) *Hanley*, Zool. Proc. 1844.

T. testâ suborbiculari, tenui, subæquilaterali, subventricosâ, im-politâ, intus extusque albâ, striis concentricis tenuissimis lineisque radiantibus minutissimis obsoletè decussatâ, utrinque rotundatâ; margine ventrali arcuato; dorsali utrinque convexiusculo et subæqualiter declivi; latere antico paululum longiore; flexurâ costâque umbonali obsoletis; ligamento angustissimo, infosso; dentibus lateralibus magnis, æquidistantibus.

Suborbicular, thin, subequilateral, rather ventricose, dull, both externally and internally white, with very delicate concentric striae and most minute radiating lineoles; ventral margin strongly arcuated; extremities rounded; dorsal edges nearly equally sloping and slightly convex; anterior side very slightly the longer; umbonal ridge and fold obsolete; ligament very narrow, sunken; lateral teeth distinct, equidistant.

Not unlike the shell which is figured without a name in the 292nd plate (f. 8.) of the *Encyclopédie Méthodique*.

Chain Island, South Seas.

54. *TELLINA NUX* (pl. lvi. f. 33.) *Hanley*, Zool. Proc. 1844.

T. testâ obovali, subinæquivalvi, subæquilaterali, tenui, convexâ aut subventricosâ, nitidâ, sublaevigatâ aut infernè concentricè substriatâ, intus extusque albidâ, umbonibus hyalinis et fulvis; margine ventrali subarcuato; dorsali utrinque convexo, satis et æqualiter declivi; extremitate posticâ obtusâ, attenuatâ; ligamento angustissimo, infosso; natibus obtusis; flexurâ distinctâ; costâ umbonali subinconspicuâ; dentibus lateralibus distinctis, antico paululum propinquiore.

Oboval, thin, slightly inequivalve, almost equilateral, from convex to subventricose, rather glossy, whitish both externally and

internally, with the umbones diaphanous and of a tawny orange-colour; nearly smooth or merely substriated concentrically towards the somewhat arcuated ventral margin; dorsal edges convex, equally and moderately sloping on either side; beaks obtuse; fold distinct; umbonal ridge almost obsolete; posterior side obtuse and attenuated; ligament extremely narrow, sunken; lateral teeth distinct, the anterior slightly the nearer.

Cagayan, Misamis, Mindanao; St. Nicolas, Zebu.

More oval than the three succeeding allied species.

55. *TELLINA PINGUIS* (pl. lvi. f. 34.) *Hanley*, Zool. Proc. 1844.

T. testâ parvâ, rotundato-ovali, tenui, subinæquivalvi, subæquilaterali, nitidâ, convexâ aut subventricosâ, intus extusque albidâ (rarius incarnatâ), lævigatâ (nonnunquam concentricè substriatâ); margine ventrali arcuato, dorsali utrinque convexo et subæqualiter declivi; extremitate posticâ obtusâ; flexurâ distinctâ; natibus minimis; costâ umbonali ferè obsoletâ; ligamento angustissimo, infosso; dentibus ut in *Nuce*.

Rounded-oval, thin, rather inequivalve, nearly equilateral, from convex to subventricose, both externally and internally whitish, or more rarely flesh-coloured, smooth, (sometimes concentrically substriated); the ventral edge arcuated; the dorsal on each side nearly equally sloping and convex; beaks minute; fold distinct; umbonal ridge almost obsolete; posterior end obtuse; ligament extremely narrow and sunken; teeth as in *Nux*.

St. Nicolas, Zebu.

By its more orbicular outline it may be distinguished from *Nux* and *Custa*. It is still more closely allied to *Robusta*, but its tenuity, more obtuse hinder extremity, and the greater convexity and less sudden slope of the dorsal edges, suffice for its separation.

56. *TELLINA ROBUSTA* (pl. lvi. f. 2, 3.) *Hanley*, Zool. Proc. 1844.

T. testâ parvâ, rotundato-subtrigonâ, solidâ, subinæquivalvi, subæquilaterali, ventricosâ, nitidâ, aut albo-flavescente, aut pallidè rosacèâ, sublævigatâ (plerumque inferius remotè substriatâ); margine ventrali valdè arcuato, dorsali utrinque subrecto et valdè declivi; latere postico attenuato, ferè subrostrato, ad extremitatem acuminato; ligamento angustissimo, infosso; natibus distinctis, prominentibus, et rectè incurvatis; umbonibus tumidis; flexurâ distinctâ; costâ umbonali ferè obsoletâ; lunulâ parvâ; superficie internâ, plerumque sub umbonibus, flavidâ aut rosèâ; dentibus ut in *Nuce*.

Rounded-subtrigonal, solid, rather inequivalve, nearly equilateral, ventricose, of a glossy yellowish white, or pale rose-colour, nearly smooth, or marked in fresh specimens with distant striulæ towards the extremely arched ventral margin; dorsal edges nearly straight and strongly sloping on either side; posterior side attenuated, almost beaked, and obtusely acuminate at the extremity; ligament extremely narrow and sunken; umbones tumid; beaks distinct, prominent, and incurved; fold distinct; umbonal ridge almost obsolete; inside usually yellow or rose-coloured at the umbones; a small lunule; teeth as in *Nux*.

Isle of Annaa, South Seas, and Isle of Burias, Philippines.

Is closely allied to *Nux*, *Pinguis* and *Casta*, but of a stouter texture even in the youngest individuals. The ligamental edge being nearly straight, easily separates it from *Pinguis*, where it is decidedly convex.

57. *TELLINA CASTA* (pl. lvi. f. 9.) *Hanley*, Zool. Proc. 1844.

T. testâ obovali, tenuissimâ, subinæquivalvi, subinæquilaterali, pellucidâ, convexâ, nitidâ, extus intusque candidâ, lævigatâ; margine ventrali maximè arcuato; dorsali utrinque subrecto, subæqualiter satisque declivi; extremitate posticâ angustâ, biangulatâ; ligamento angustissimo, subinfosso; natibus acutis; flexurâ ventrali costâque umbonali distinctis; dentibus ut in *Nuce*.

Oboval, extremely thin, slightly inequivalve, nearly equilateral, convex, glossy, pellucid, white, smooth; ventral margin extremely arcuated; the dorsal on either side nearly straight, moderately and nearly equally sloping; beaks acute; fold and umbonal ridge distinct; posterior extremity narrow and biangulated; ligament extremely narrow and scarcely, if at all, projecting; teeth as in *Nux*.

Singapore.

Bears some resemblance to *Nux*, but the shape is less broad, the ventral edge decidedly arcuated, the dorsal edges less convex and shorter, and the umbones colourless.

58. *TELLINA BALAUSTINA* (pl. lvi. f. 10.) *Lin.* Sys. 1119. *Poli.* Test. Sic. vol. i. t. 14. f. 17.; *Lam.* 2nd ed. vol. vi. p. 209; *Phil.* En. Mol. Sic. vol. i. p. 25; *Hanl.* Des. Cat. p. 72. sup. t. 9. f. 17; *Lucina balaustina*, *Payr.* Cat. Cors. t. 1. f. 21, 22.

T. testâ obovatâ, aut suborbiculari, solidiusculâ, convexâ, nitidiusculâ, albo-flavescente, radiis angustis rubris ornatâ, sublævigatâ, nonnunquam lineis elevatis concentricè striatâ; margine ventrali arcuato; dorsali utrinque convexo aut convexiusculo, satisque de-



clivi; latere antico vix paululum longiore, ad extremitatem rotundato; extremitate posticâ obtusissimè subangulatâ; natibus acutis, prominentibus, rectè incurvatis; ligamento angustissimo, infosso; umbonibus plerumque flavis; flexurâ ventrali costâque umbonali satis conspicuis; superficie internâ flavâ; dentibus lateralibus magnis, subæquidistantibus.

Shape varying from obovate to suborbicular, moderately strong, decidedly convex, when quite perfect dull and covered with raised membranaceous concentric striæ, but usually worn smooth and rather glossy; whitish or yellowish, with numerous narrow red rays and the umbones tinged with yellow; ventral edge arcuated; both edges of the dorsal line convex and moderately sloping; front extremity rounded; that of the scarcely shorter posterior side most obtusely subangulated; beaks prominent and incurvated; ligament extremely narrow and sunken; fold and umbonal ridge tolerably manifest; inside yellow; lateral teeth large and nearly equidistant.

Mediterranean.

59. *TELLINA OBLIQUILINEATA* (pl. lvi. f. 11, and pl. lix. f. 127.)  
*Conrad*, Jour. Ac. N. S. Philad. 7.

T. testâ parvâ, ovatâ, tenuiusculâ, inæquilaterali, convexâ, nitidâ, intus extusque flavescente aut rosaceo-incarnatâ, tenuissimè striatâ; striis obliquis et anticè flexuosis; margine ventrali subarcuato; dorsali anticè arcuato et declivi, posticè longiore convexiusculo et angulum acutum cum margine ventrali formante; latere antico brevi, rotundato; postico producto, acuminato; natibus ligamento parvo prominulis; flexurâ costâque umbonali inconspicuis; dentibus lateralibus satis distinctis, subæquidistantibus, antico majore.

Small, ovate, rather thin, very inequilateral, glossy, convex, tinged both externally and internally with yellow or rosy flesh-colour, and most delicately but distinctly striated in oblique lines which become flexuous in front; the ligament small and scarcely projecting; the beaks rather prominent; the umbonal ridge and the fold not conspicuous; anterior side short and rounded, the dorsal slope rather sudden and very convex; posterior side produced, and rendered acuminated by the elongated and rather convex ligamental edge forming an acute angle with the rather arcuated ventral; lateral teeth distinct, neither very distant, the anterior decidedly larger.

Sandwich Isles.

60. *TELLINA AMPULLACEA* (pl. lvi. f. 23, 24.) *Philippi*, (June

1844) Ab. und Bes. Conch. part 5. t. 5. f. 7; T. puella, *Hanley*, Zool. Proc. (November) 1844.

T. testâ inæquilaterali, tenui, ventricosâ, lævi, nitidiusculâ, extus intusque albido-roseâ aut pallidè carneâ; margine ventrali anticè arcuato, posticè sursum acclinato; dorsali anticè primum retuso et vix declivi deinde arcuato satisque declivi, posticè primum subrecto deinde convexiusculo et valde declivi; latere antico longiore, rotundato; postico brevi, et obtusè angulato; flexurâ costâque umbonali haud conspicuis sed satis distinctis; lunulâ parvâ, impressâ; natibus obtusis; ligamento angusto, prominulo; dentibus parvis; lateralibus remotis, subæquidistantibus.

Ovate, thin, inequilateral, ventricose, smooth, rather glossy, pink or flesh-coloured both externally and internally; ventral edge arcuated in front, rising posteriorly; dorsal edge convex and but little sloping in front, slightly convex and much sloping behind; anterior side the longer, rounded; posterior side short, narrowed and angulated; umbonal ridge nearly obsolete, ventral flexure distinct; beaks obtuse; ligament rather prominent; teeth small, the lateral distant and nearly equally remote.

Senegal.

Dr. Philippi's publication had not reached me at the date of my describing this very distinct species.

61. TELLINA STRIATULA (pl. lxi. f. 175.) *Lam.* no. 33; *Enc. Mèth.* t. 292. f. 1; T. hippoidea, *Jonas*, Ab. und Bes. Conch. part 3. t. 5. f. 1.

T. testâ sublenticulari, subobliquâ, paululum subinæquivalvi, solidiusculâ, subnitidâ, candidâ, sublævigatâ; margine ventrali valdè acuto, posticè sursum acclinato; dorsali anticè convexo, satisque declivi, posticè subrecto et valdè declivi; natibus acutis, prominentibus; flexurâ ventrali subinconspicuâ; areâ posticâ dorsali marginibus acutis costæ umbonalis circumseptâ, planulatâ aut subconcavâ; ligamento infosso; latere antico longiore, rotundato; extremitate posticâ breviter acuminatâ; superficie internâ niveâ; dentibus lateralibus magnis, antico approximato.

Sublenticular, rather oblique, very slightly inequivalve, not very strong, convex, slightly glossy, white, nearly smooth, (being only marked with most indistinct minute radiating lines near the arcuated ventral margin which rising upward posteriorly almost forms a rectangle with the nearly straight and strongly sloping ligamental edge; front side the longer, extremity rounded, dorsal edge convex and moderately sloping; beaks acute and prominent, slightly curving

forwards; ligament sunken; edges of the almost terminal umbonal ridge acute, the intervening space flattened or concave; fold not conspicuous; inside pure glossy white; lateral teeth large, the anterior approximate.

St. Nicholas, Zebu.

The *Inflata* of Chemnitz (6. f. 86.) is very like this species, but I do not venture to assert its identity, as the figure certainly differs in some respects, and neither Lamarck nor Philippi, although both conversant with the figure, have quoted it.

62. *TELLINA DELTOIDALIS* (pl. lix. f. 128 and pl. lxiv. f. 229.)  
*Lam.* no. 49; *Hanl. Des. Cat.* p. 70. sup. t. 13. f. 3; *T. lactea*,  
*Quoy et Gai.* Voy. Astrol. Zool. vol. 3. p. 501. t. 81. f. 14, 15, 16;  
*Deles.* t. 6. f. 7.

T. testâ subtrigonâ, ovatâ, obovatâ, aut suborbiculari, solidâ, sub-inequivalvi, convexâ, subæquilaterali, impolitâ aut vix nitidiusculâ, intus extusque albidâ, sublævigatâ; margine ventrali in medio subrecto, utrinque sursum acclivi; dorsali anticè vix declivi, posticè valdè declinente incurvato; latere postico subcuneiformi, ad extremitatem subangulato; extremitate anticâ obtusâ; natibus prominentibus, rectè incurvatis; flexurâ costâque umbonali distinctis; ligamento magno, infosso; dentibus lateralibus parvis, antico approximato, postico remoto plerumque subobsoleto.

Var. Latere antico haud dilatato; margine dorsali anticè magis declivi, posticè recto haudque incurvato.

Shell varying in shape from ovate-triangular to suborbicular-triangular, solid, slightly inequivalve, convex, subequilateral, scarcely if at all glossy and usually quite dull chalky white, nearly smooth or only marked with rather strong lines of growth; ventral margin sloping upward at both ends, nearly straight in the middle; fold and umbonal ridge distinct; beaks prominent and incurved; ligament large but sunken; anterior side dilated, obtuse, dorsal slope slight; posterior side somewhat wedge-shaped (at times almost subrostrated), its dorsal edge incurved and very strongly sloping, its extremity subangulated and much attenuated; lateral teeth small, the anterior approximate, the posterior distant and often almost obsolete.

Var. Ligamental edge not incurved but straight; anterior side not dilated, slope stronger, and extremity rounded.

Australia.

63. *TELLINA FAUSTA* (pl. lxiv. f. 230, 234) *Donovan*, vol. 3.  
t. 98; *Dor. Cat.* t. 5. f. 5; *Dillwyn D. Cat.* p. 94; *Hanl. Des. Cat.*

p. 68. t. 4. f. 68; *T. lævis*, *Wood*, Gen. Con. p. 181. t. 37. f. 1; *T. remies*, *Born*, p. 36. t. 2. f. 11; Lam. no. 31; List. t. 266. f. 102.

*T. testâ* ovato-suborbiculari, solidâ, convexâ aut subventricosâ, impolitâ, albidâ; concentricè striatâ, striis tenuibus, confertissimis, ad umbones posticèque obsoletis; lineis verticalibus interruptis fissuræformibus notatâ; margine ventrali convexo vel subarcuato; dorsali posticè subrecto (plerumque subincurvato) declivi, anticè prope umbones retuso, deinde convexo, satisque declivi; latere postico brevior, subbiangulato; extremitate anticâ rotundatâ; natibus prominentibus, acutis; ligamento maximo, prominente; flexurâ ventrali satis distinctâ; superficie internâ nitidâ, plerumque flavescente; dentibus lateralibus magnis, antico approximato.

Var. *Obovatâ*, extus flavescente, intus flavâ.

Rounded-ovate, solid, varying from convex to subventricose, dull whitish, with vertical fissure-like interrupted lines, and crowded concentric fine striæ, which latter become obsolete on the umbones and posteriorly; ventral edge varying from convex to subarcuated; beaks prominent and acute, with a forward inclination; fold tolerably distinct; ligament very large, projecting; anterior side rounded, rather the longer, the dorsal edge at first slightly concave and then convex and moderately sloping; posterior end nearly biangulated, the dorsal edge nearly straight (usually incurved) and rather strongly sloping; inside glossy, white, or tinged with yellow; lateral teeth large, anterior approximate.

Var. *Obovate*, yellowish; within deep yellow.

West Indies.

64. *TELLINA DISCUS* (pl. lxiv. f. 228, 232) *Hanley*, Zool. Proc. 1844.

*T. testâ* *T. remiei* simillimâ, sed subobliquâ et sulcis concentricis valdè irregularibus vixque continuis; natibus haud rectè incurvatis; margine dorsali posticè elevatiore, anticè prope nates prominulas subincurvato; umbonibus lævigatis; extremitate posticâ angulatâ.

Var. *Testâ* magis compressâ; sulcis concentricis haud rudibus, et versus marginem ventralem solum conspicuis.

In sculpture, colour, and general shape extremely like *Remies*, but appearing oblique from the beaks having a forward inclination, and the anterior dorsal edge being slightly incurved; posterior dorsal edge the more elevated, longer than in the last species; posterior extremity distinctly angulated; ventral edge slightly ascending posteriorly; beaks rather prominent.



Var. More depressed, the sulci less coarse and only visible near the ventral margin.

Isle of Ticao, Philippines.

65. *TELLINA REMIES* (pl. lxiv. f. 226.) *Lin. Sys.* 1119; *Lin. Mus. Ulr.* p. 482; *Chem.* vol. 6. f. 113; *Wood, Gen. Conch.* p. 182. t. 38. f. 1; *Dillw. D. Cat.* p. 94; *Hanl. Des. Cat.* p. 67. sup. t. 1. f. 2; *T. sulcata*, *Lam.* no. 32; *T. convexa*, *Wood, Ind. Test. Sup.* t. 1. f. 2.

*T. testâ* suborbiculari, solidissimâ, inæquivalvi, æquilaterali, ventricosâ, subimpolitâ, extus intusque albidâ, epidermide tenui fulvo-cinereâ aut fulvo-fuscâ indutâ; supernè concentricè striolatâ, infernè concentricè sulcatâ, sulcis latis, profundis, rudibus; margine ventrali valdè arcuato; dorsali utrinque subrecto, anticè paululum, posticè satis declivi; latere antico rotundato; postico supernè subangulato; ligamento satis magno, prominente; lunulâ nullâ; natibus obtusis et rectè incurvatis; flexurâ ventrali conspicuâ; costâ umbonali subobsoletâ; dentibus magnis, validis, antico laterali quamplurimum approximato, postico permagno subremoto.

Suborbicular, very solid, inequivalve, equilateral, ventricose, scarcely glossy, whitish both within and without (covered when fresh with a dull yellowish brown epidermis), most delicately striated concentrically near the obtuse and incurved beaks, but very coarsely grooved towards the regularly arcuated ventral edge; anterior side rounded, its dorsal edge nearly straight or very slightly convex and but little sloping; posterior side subangulated above, its dorsal edge moderately declining and straight or subretuse; fold obscure, flexure conspicuous; ligament large and prominent; no lunule; teeth large and strong, the front lateral as close as possible, the hinder very large and rather distant.

Baclyon, Isle of Bohol (Cuming); Amboyna; Australia.

66. *TELLINA CYRENOIDEA* (pl. lvi. f. 31) *Hanley, Zool. Proc.* 1844.

*T. testâ* suborbiculari, solidiusculâ, inæquivalvi, valdè inæquilaterali, subventricosâ, sordidè albâ (intus sub umbonibus purpureâ), concentricè costellatâ; striis minutis obliquè radiantibus costellas confertas posticè decussantibus; margine ventrali arcuato; dorsali utrinque valdè et subrectè declivi, anticè brevi, posticè longiore; latere antico breviorè, obtusè rotundato; extremitate posticâ obtusâ, paululum attenuatâ; natibus prominentibus; lunulâ distinctâ; ligamento infosso; flexurâ costâque umbonali

obsoletissimis: dentibus lateralibus parvis, distinctis, subæquidistantibus.

Suborbicular, tolerably solid, inequivalve, very inequilateral, rather ventricose, hardly at all glossy, dirty white, with regular close-set narrow concentric ribs, which posteriorly are decussated by minute rather oblique radiating striulæ; ventral edge arcuated; anterior side the longer, its dorsal edge strongly sloping, rather long, nearly straight, its extremity rounded; posterior end obtusely rounded, slightly subangulated above, by the short straight and much sloping dorsal edge; beaks prominent; fold and umbonal ridge obsolete; ligament sunken; a purple internal stain beneath the umbones; lateral teeth small, but distinct, subequidistant and rather close.

St. Nicolas, Isle of Zebu.

67. *TELLINA SPLENDIDA* (pl. lvi. f. 39.) *Anton, Verz. Conch.* p. 5.

T. testâ suborbiculari, solidiusculâ, subinæquivalvi, inæquilaterali, convexâ, nitidâ, albido-flavescente, prope umbones subcærulescente aut purpureo tinctâ; anticè profundè et concentricè sulcatâ, dein striis subradiantibus remotis obliquè exaratâ, et in valvâ sinistrâ posticè concentricè striatâ; margine ventrali subarcuato; dorsali utrinque subrectè declivi, anticè brevi; extremitate anticâ obtusè rotundatâ, supernè angulatâ; latere postico longiore, ad extremitatem rotundatam subattenuato; ligamento infosso; costâ umbonali obsoletâ; flexurâ ventrali subinconspicuâ; superficie internâ purpureâ; dentibus lateralibus parvis, distinctis, subapproximatis, antico magis approximato.

Suborbicular, tolerably strong, rather inequivalve, inequilateral, glossy (usually, as in the succeeding species, coated here and there with a dark rust-like substance), yellowish white assuming a pale blueish or purplish cast towards the beaks; with strong rather distant concentric anterior grooves, followed by deep and not very close oblique radiating ones, which terminate posteriorly in one valve in fine close concentric striæ; ventral edge rather arcuated; anterior extremity obtusely rounded and rather angulated by the very short straight and much sloping dorsal edge; posterior side the longer, rather attenuated at its rounded extremity, the dorsal slope strong and nearly straight; ligament sunken and small; flexure not conspicuous; umbonal ridge obsolete; inside purple; lateral teeth small but distinct, close, anterior one the more so.

Basay, Isle of Samar; coarse sandy mud, four fathoms; (Cuming).

68. *TELLINA SENEGALENSIS* (pl. lvi. f. 17.) *Hanley, Zool. Proc.* 1844.

T. testâ *T. splendida* simillimâ, sed striis sulcisque exilioribus et magis confertis; utrâque valvulâ striis arcuatis obliquis ad extremitatem posticam notatâ; superficie internâ purpureâ, albo posticè biradiatâ.

Extremely like the last, but in addition to the superior delicacy and more crowded arrangement of both sulci and striæ, the posterior end is distinguished by the possession of those curved oblique striæ which we perceive less distinctly in *Carnaria*; the inner surface is adorned posteriorly with two white or pale rays on a purplish ground.

Senegal.

69. TELLINA CARNARIA (pl. lvi. f. 37, 38.) *Lin.* 1119; *Chem.* vol. 6. f. 126; *Wood, Gen. Conch.* t. 40. f. 4; *List.* t. 339. f. 176. *Hanl. Des. Cat.* p. 72. t. 4. f. 79; *Lucina carnaria, Lam.* no. 8; *Strigilla carnaria, Turt. Brit. Biv.* p. 117. t. 7. f. 15.

T. testâ suborbiculari, convexâ, subinæquivalvi, inæquilaterali, solidiusculâ, nitidâ, albido-roseâ, (intus roseâ), variè et exiliter striatâ, striis medio obliquis, radiantibus, ad latus posticum spectantibus; anticè flexuosis et cum striis mediis angulum formantibus; posticè tenuissimis, confertissimis, arcuatis (nonnunquam subobsoletis, et cum striis mediis angulum acutissimum formantibus); margine ventrali subarcuato; dorsali utrinque subrecto, declivi, anticè brevi, posticè elongato; extremitate anticâ obtusâ, superne subangulatâ; latere postico valdè longiore, attenuato, ad extremitatem rotundato; flexurâ costâque umbonali obsoletis; dentibus lateralibus distinctis, subæquidistantibus.

Suborbicular, convex, moderately strong, glossy, pink, rose-coloured, or whitish more or less tinged with pink, most delicately striated in various directions; striæ on the anterior area very flexuous and forming an angle with those on the central area, which obliquely radiate posteriorward; striæ on the posterior slope extremely fine, curved, and meeting at a very acute angle; ventral edge arcuated; anterior side much the shorter, its extremity obtuse, and subangulated above, its dorsal edge short and moderately sloping, posterior extremity rounded and narrowed, the dorsal edge greatly sloping and nearly straight; a small lunule; ligament sunken; umbonal ridge and flexure nearly obsolete; beaks incurved; inside rosy; lateral teeth distinct and nearly equidistant.

W. Indies; W. Columbia.

The shell is deeper from the umbones to the ventral margin, than in *Splendida*; the posterior and central striæ are often divided by a smooth radiating space.

70. *TELLINA SINCERA* (pl. lix. f. 144.) *Hanley*, Zool. Proc. 1844.

T. testâ *T. Carnaria* similimâ, sed majore, latiore, compressâ et albidâ; striis tenuioribus; ligamento valdè angusto; natibus paululum ad latus anticum spectantibus; margine ventrali solum sub-arcuato; dentibus lateralibus conspicuis, subæquidistantibus.

Extremely like *Carnaria*, but larger, broader, white and depressed; the ligament extremely narrow; sculpture still finer, beaks slightly curved forward, ventral edge less arcuated; lateral teeth conspicuous and subequidistant.

N. W. Coast of America, (Dr. Sinclair).

71. *TELLINA PISIFORMIS* (pl. lvi. f. 30.) *Lin.* Syst. 1120.; *Dillwyn*. D. Cat. p. 102.; *Wood*. Gen. Con. p. 194.

T. testâ parvâ, suborbiculari, solidiusculâ, ventricosâ, nitidiusculâ, albido-roseâ; obliquè substriatâ, striis posticè angulo acuto reflexis; margine ventrali convexo; dorsali anticè brevi subrecto et paululum declivi, posticè convexo et valdè declivi; extremitate anticâ obtusâ; latere postico longiore, rotundato; natibus prominentibus; umbonibus extus intusque roseis; flexurâ costâque umbonali obsoletis; dentibus lateralibus distinctis, subæquidistantibus.

Var. Testâ majore, pallidè luteâ.

Small, subglobose, tolerably strong, but slightly glossy, both within and without of a pinkish white with the umbones rosy, obliquely substriated, the striæ curving posteriorwards, except over the umbonal slope, (which, as well as the fold, is quite obsolete) where they are met at acute angles by another set with a slight anterior inclination; ventral edge simply convex; front dorsal edge very short, nearly straight, and scarcely sloping, the hinder one convex, and greatly sloping; anterior extremity obtuse; posterior side the longer and narrower, tip rounded; beaks very prominent; lateral teeth distinct, and nearly equidistant.

Var. Larger, and of an uniform pale yellow.

W. Indies.

The *Cardium discors* of Montagu, which has erroneously been inserted in the British Fauna, is evidently this or the succeeding species.

72. *TELLINA FLEXUOSA* (pl. lvi. f. 28, 29.) *Say*. Journ. Ac. N.S.; *Philad.* vol. ii. p. 303.; *Hanl.* Des. Cat. p. 2; *T. mirabilis*, *Philippi*, *Wieg.* Archiv. f. nat. 1841. p. 260.



T. testâ *T. pisiformi* simillimâ, pallidiore autem et margine ventrali magis arcuato; striis obliquis, fortioribus, flexuosis, posticè bis terve in ziczac flexis; ligamento minimo,

Extremely like *T. pisiformis*, but paler and more arcuated at the ventral margin; the oblique striæ are flexuous and more deeply impressed than in that species, and at the posterior extremity several times change their direction at acute angles, thus forming numerous zigzag lines; the ligament is minute and not prominent.

United States.

73. *TELLINA FIMBRIATA* (pl. lx. f. 132.) *Hanley*, Zool. Proc. 1844.

T. testâ obovato-suborbiculari, solidâ, convexâ, impolitâ, intus extusque candidâ, striis concentricis confertissimis lamellosis fimbriatis et lineis radiantibus confertis decussatâ; margine ventrali arcuato, posticè sursum acclinato; dorsali utrinque convexiusculo, anticè subdeclivi, posticè valdè declivi; latere antico longiore, rotundato; extremitate posticâ brevi, angulatâ; costâ umbonali valdè conspicuâ; ligamento infosso; lunulâ distinctâ; dentibus lateralibus subremotis, subæquidistantibus.

Rounded-obovate, solid, convex, very inequilateral, dull white, with extremely delicate crowded lamellar striæ, which are fringed by the intersection of radiating lines; one of the valves projecting beyond the other at the beaks; ventral margin arcuated and rising posteriorly; anterior side the longer and rounded, its dorsal edge moderately convex and sloping; posterior side short and angulated, the ligamental edge strongly sloping and tolerably convex; fold very prominent; ligament sunken; a distant lanceolate lunule; inside white; lateral teeth rather remote and subequidistant.

Mus. Cuming.

74. *TELLINA DECUSSATA* (pl. lx. f. 184.) *Lam.*, no. 45.; *Hanl. Des. Cat.* p. 70.; *Encyc. Mèth.* t. 292. f. 2.?

T. testâ suborbiculari, subæquilaterali, solidâ, convexâ aut sub-ventricosâ, impolitâ, sordidè albâ, striis concentricis costellas radiantes decussantibus; striis elevatis, confertissimis, tenuissimis; costellis numerosis, paululum obsoletis; margine ventrali arcuato; dorsali utrinque declivi, anticè convexo, posticè convexiusculo; latere antico rotundato; postico obtusè angulato; ligamento infosso; natibus prominulis; flexurâ costâque umbonali inconspicuis; dentibus lateralibus magnis, antico propinquiore.

Var. Testâ majore, candidâ; striis magis elevatis et minus confertis; margine dorsali postico elevatiore.

Suborbicular, solid, nearly equilateral, from convex to subventricose, dull dirty white, sculptured with numerous somewhat obsolete radiating costellæ, which are decussated by very fine raised crowded concentric striæ; ventral edge arcuated; the dorsal sloping from the rather prominent beaks on either side, and rather the more convex in front; anterior side rounded, posterior obtusely subangulated; ligament sunken, fold and umbonal ridge not conspicuous; inside white; lateral teeth large, the front one the nearer.

Var. Larger, white; the hinder (and not as in the type,) the front), dorsal edge the more elevated; the striæ more elevated and rather more distant.

Australia; the variety from Ceylon.

75. *TELLINA CARNICOLOR*, (pl. lvi. f. 15.) ; *T. incarnata* *Hanley*, Zool. Proc. 1844.

*T. testâ obovatâ, subobliquâ, inæquilateralî, ventricosâ, solidâ, incarnatâ aut albido-roseâ, impolitâ; striis elevatis concentricis tenuissimis strias radiantes elevatas confertissimè decussantibus; margine ventrali arcuato, posticè sursum accliviore; dorsali anticè declivi et prope nates paululum incurvato, posticè elevatiore subarcuato et subito declivi; latero antico longiore, rotundato; extremitate posticâ rotundato-angulatâ; ligamento angusto, parvo, infosso; natibus acutis, prominentibus; flexurâ costâque umbonali subobsoletis; lunulâ lanceolatâ; superficie internâ flavescente, margines versus subroseâ; dentibus lateralibus maximis, subæquidistantibus.*

Obovate, rather oblique, dull, solid, ventricose, pinkish white, or flesh-coloured, closely decussated by elevated radiating, and by fine concentric lamellar striæ; ventral edge arcuated, and ascending posteriorly; anterior side the longer, its extremity rounded and slightly attenuated, its dorsal edge sloping, and near the acute and prominent beaks, somewhat incurved; hinder extremity subangulated, the more elevated ligamental edge sloping rather suddenly, and in an arcuated line; ligament small, narrow, and sunken; umbonal ridge and fold nearly obsolete; a lanceolate lunule; inside yellowish, pink near the margins; lateral teeth very large and nearly equidistant.

San Nicolas, Zebu.

In almost every adult specimen the tips of the beaks are chalky white, the umbones yellow, and the ligamental edge rosy.

I had inadvertently designated this shell with a pre-occupied name.

76. *TELLINA GARGADIA* (pl. lxi. f. 156 and pl. lxii. f. 181,)

*Lin. Sys.* 1116; *Lin. Mus. Ulr.* 476. *Chemn.* vol. vi. f. 63, 64; *Lam.* no. 40; *Hanl. Des. Cat.* p. 69. t. 3. f. 1.

T. testâ ovatâ, solidâ, compressiusculâ, nitidiusculâ, candidâ; margine ventrali arcuato; dorsali anticè subrecto et valdè declivi, posticè elevatiore valdè declivi paululum convexiusculo dentato; latere antico longiore, angustato, rotundato; extremitate posticâ, obtusè biangulatâ; lunulâ areâque ligamentali excavatis; natibus acutis, prominentibus, ligamento infosso; dentibus lateralibus validis, æquidistantibus.

Var. *a.* Sulcis irregularibus, rudioribus, subobliquis, concentricis, posticè exaratâ; lineis subobliquis, exilibus, concentricis, anticè striatâ. Var. *b.* Sculpturâ obsoletissimâ.

Ovate, solid, rather compressed, and not very glossy, uniform white; ventral edge arcuated; anterior side the longer, attenuated but rounded at its extremity; its dorsal slope sudden, and nearly straight; hinder side obtusely subangulated, its dorsal edge toothed, rather short and scarcely convex, the slope sudden; ligament sunken; lunule and lozenge excavated; beaks acute and prominent; fold and umbonal ridge by no means conspicuous; inside white, or yellowish white; the lateral teeth strong and subequidistant.

Var. *a.* Hinder side roughened by coarse irregular rather oblique concentric grooves; anterior surface traversed by more or less delicate rather obliquely concentric striæ. Var. *b.* Sculpture almost entirely obsolete, but usually discernible on one of the areas.

Siquijor, Philippines, (Cuming), &c.

77. *TELLINA SPINOSA* (pl. lviii. f. 40.) *Hanley*, *Zool. Proc.* 1844.

T. testâ ovatâ, solidiusculâ, subimpolitâ, inæquilaterali, convexiusculâ, extus intusque albidâ, striis minutis elevatis confertissimis concentricè asperatâ; margine ventrali arcuato, posticè sursum acclinato, dorsali posticè elevatiore convexo et declivi, antice prope nates acutas subincurvato, deinde subrecto subdeclivi; latere postico brevi; extremitate anticâ rotundatâ; extremitate posticâ spinarum duabus vel tribus seriebus radiantibus serratâ; lunulâ parvâ distinctâ; ligamento infosso; dente laterali antico subapproximato, postico remoto.

Ovate, moderately strong, inequilateral, not very convex, dull whitish, with minute elevated crowded concentric striæ; ventral edge rather arcuated, and rising behind; anterior side the longer, its extremity rounded, its dorsal edge slightly incurved near the

acute beaks and then straightish, (or slightly convex), and moderately sloping; posterior side short, and armed at its extremity with two or three rows of radiating serrated spines, its dorsal edge convex and sloping; ligament sunken; a small distinct lunule; inside white, the anterior lateral tooth slightly the closer, posterior distant.

Island of Ticao.

78. *TELLINA CRASSA* (pl. lxi. f. 169, 173.) *Pennant*, Brit. Zool. vol. iv. p. 73. t. 48. f. 28; Wood Gen. Conc. p. 186. t. 40. f. 1; Turt. Biv. Brit. p. 109. t. 7 f. 2; Lam. no. 35; Hanl. Des. Cat. p. 68. t. 4. f. 75; List. t. 299. f. 136; *T. rigida* *Don*. Br. Sh. vol. 3. t. 103.

*T. testâ* rotundato-ovali, subobliquâ, solidâ, inæquivalvi, subventricosâ, impolitâ, albidâ, radiis angustis rubris plerumque ornatâ, sulcis rudibus concentricè exaratâ; margine ventrali arcuato; dorsali utrinque declivi, convexo, posticè elevatiore, anticè convexiore; latere antico longiore, rotundato, prominente; postico abbreviato, ad extremitatem obtuso; costâ umbonali obsoletâ; natibus incumbentibus; lunulâ parvâ, excavatâ; ligamento infosso; flexurâ distinctâ; superficie internâ plerumque aurantiâ, (rarius albidâ); dentibus lateralibus magnis, antico subapproximato; cicatricibus muscularibus profundè impressis.

Roundish oval, slightly oblique, inequivalve, very inequilateral, rather ventricose, dull white, almost always adorned with narrow red rays, and concentrically and coarsely grooved; the ventral edge arcuated; the anterior side the longer, its dorsal edge arcuated, its extremity rounded and projecting; the posterior side rather short, its dorsal slope very sudden and very convex, its tips most obtusely subangulated; the umbonal ridge obsolete; ligament sunken; fold distinct; the beaks recurved anteriorwards; the lunule small and excavated; inside usually stained with orange, very rarely white; the lateral teeth large, the anterior one rather approximate; muscular impressions deeply impressed.

Britain; Europe.

The *T. maculata* of Turton (Biv. Brit.) is a young discoloured specimen of this species.

79. *TELLINA PLECTRUM* (pl. lxi. f. 177.) *Hanley*, Zool. Proc. 1845.

*T. testâ* obovatâ, solidâ, convexiusculâ, subæquilaterali, impolitâ, intus extusque albidâ, lamellis confertis concentricis undique asperatâ; interstitiis lævibus; margine ventrali arcuato; dorsali utrinque subrecto, subdeclivi (in junioribus declivi); extremitate anticâ



rotundatâ; latere postico vix paululum longiore, biangulato; natis acutis; costâ umbonali prominulâ; ligamento infosso (?); lunulâ distinctâ; dente laterali antico majore postico parvo et remotiore.

Obovate, solid, moderately convex, nearly equilateral, not polished, white, the entire surface covered with regular, distinct, short and crowded lamellæ, the interstices smooth; ventral edge arcuated; anterior side very slightly the shorter, extremity rounded; posterior extremity biangulated; dorsal edges straightish, and not greatly sloping; beaks acute; ligament sunken (?); fold not prominent; a distinct lunule; inside white, the front lateral tooth distinct, the hinder small and remote.

A single valve in the collection of J. E. Gray, Esq. is all I have ever seen of this distinctly characterized species, I am consequently unable to state whether it be equivalve or not.

80. *TELLINA SCOBINATA* (pl. lxi. f. 235.) *Lin. Syst.* 1119; *Lin. Mus. Ulr.* 482; *Chem.* vol. 6. f. 122-124; *Wood, Gen. Conch.* p. 180. t. 35. f. 1; *Lam.* no 34; *Hanl. Des. Cat.* p. 68. t. 4. f. 67.

T. testâ suborbiculari, inæquivalvi, solidâ, æquilaterali, ventricosâ aut subventricosâ, impolitâ, albidâ, maculis brunneis undatis radiatâ aut nebulosâ, tuberculis, squamosis confertis undique asperatâ; margine ventrali arcuato; dorsali utrinque subdeclivi et leviter convexiusculo; extremitate anticâ rotundatâ, posticâ obtusè subangulatâ; costâ umbonali distinctâ, obtusâ; lunulâ excavatâ, lanceolatâ; flexurâ ventrali conspicuâ; ligamento depresso; disco interno albido-flavescente; dentibus lateralibus validissimis, subæquidistantibus.

Suborbicular, solid, inequivalve, equilateral, more or less ventricose, dull whitish clouded or rayed with wavy brown markings, and rough with small crowded rasp-like tubercles which become almost spinous beyond the distinct but obtuse umbonal ridge; fold conspicuous; ligament depressed; a lanceolate excavated lunule; anterior side rounded, the dorsal edge scarcely convex and little sloping; hinder side with the extremity obtusely subangulated, the dorsal edge nearly straight and moderately sloping; inside yellowish white; the lateral teeth very strong and subequidistant.

Society Islands and Philippines; (Cuming).

82. *TELLINA LINGUA-FELIS* (pl. lxiv. f. 236.) *Lin. Sys.* 1116; *Lin. Mus. Ulr.* p. 476; *Knorr*, vol. 2. t. 2. f. 1; *Wood, Gen. Conch.* t. 40. f. 2, 3; *Lam.* no. 37; *Hanl. Des. Cat.* p. 69. t. 3. f. 2.

T. testâ obovatâ, subventricosâ, solidâ, subæquilaterali, albidâ,

roseo radiatâ, impolitâ, squamis tubercularibus confertis undique asperrimâ; margine ventrali posticè arcuato, anticè sursum acclivi; dorsali anticè convexiusculo et paululum declivi, posticè elevatiore convexo et valde declivi; latere postico brevior, subrostrato; extremitate anticâ rotundatâ; natibus acutis, roseis aut roseo-purpureis, incumbentibus; lunulâ excavatâ, lanceolatâ; costâ umbonali et flexurâ conspicuis; ligamento infosso; dentibus lateralibus validis, subæquidistantibus.

Obovate, rather ventricose, crowded with rasp-like scales, solid, white with crimson rays and the beaks of the same colour; anterior side rather the longer, its extremity rounded, its dorsal edge slightly convex and little sloping; hinder side slightly beaked, the ligamental edge the more elevated convex and deeply sloping; ventral edge much arcuated in front, ascending posteriorly; flexuosity and umbonal ridge conspicuous; beaks acute, inclined forwards; lunule deeply impressed, lanceolate; lateral teeth strong, subequidistant.

Isle of Negros, Philippines; (Cuming).

82. *TELLINA RUGOSA* (pl. lxiv. f. 233, 238.) *Born*, p. 29. t. 2. f. 3, 4; Wood, Gen. Conch. t. 41. f. 2, 3; Lam. no. 38; Hanl. Des. Cat. p. 69. t. 3. f. 8.

T. testâ obovatâ, inæquivalvi, subæquilaterali, solidâ, subventricosâ, intus extusque albâ (rarius roseo-purpurascens aut aurantiâ); subconcentricè rugosâ, rugis erectis flexuosis interruptis, striis radiantibus minutissimis decussantibus; margine ventrali anticè arcuato; dorsali anticè paululum declivi, posticè subrecto et valdè declivi; latere postico obtusè subcuneiformi; lunulâ elongatâ, excavatâ; flexurâ costâque umbonali conspicuis; dentibus lateralibus magnis, subæquidistantibus.

Obovate, subequilateral, inequivalve, solid, rather ventricose, white both within and without (rarely orange or purplish crimson), with raised interrupted irregularly but concentrically disposed wavy wrinkles which become still rougher from the minute radiating striae; anterior side rounded, its dorsal edge scarcely sloping; posterior side obtusely subcuneiform; ligamental edge strongly sloping and nearly straight; ventral edge much arcuated in front; lunule very elongated, excavated; fold and flexure conspicuous; lateral teeth large, subequidistant.

Isle of Opara (Cuming), New California.

83. *TELLINA SUBTRUNCATA* (pl. lvii. f. 48.) *Hanley*, Zool. Proc. 1844.

T. testâ obovatâ, solidiusculâ, convexâ, impolitâ, valdè inæquilaterali, intus extusque striis lamellosis confertissimis fimbriatis ornatâ; margine ventrali anticè arcuato, posticè subrecto et sursum acclinato; dorsali utrinque magis minusve convexo, anticè declivi, posticè maximè declivi; extremitate anticâ rotundatâ; latere postico brevissimo, subtruncato, angulato; ligamento infosso; natibus prominentibus; costâ umbonali subinconspicuâ, terminali; dentibus lateralibus subæquidistantibus.

Obovate, moderately thick, convex, very inæquilateral, dull whitish, with very crowded fringed lamellar striæ; ventral margin arcuated in front, straightish and ascending behind; dorsal edges moderately convex; anterior side the longer, rounded, its dorsal edge sloping; posterior side subtruncated, its extremity angulated; beaks prominent; fold terminal and not prominent; ligament sunken; inside white, sometimes with two orange rays; lateral teeth subequidistant.

Isle of Bohol, Philippines.

84. *TELLINA PRISTIS* (pl. lxi. f. 160.) *Lam.* no. 41; *Hanl.* Des. Cat. p. 69. sup. t. 9. f. 4. (young); *Enc. Mèth.* t. 287. f. 1.

T. testâ rotundato-ovatâ, crassâ, subinæquilaterali, convexâ aut subventricosâ, extus intusque albâ, impolitâ; concentricè striatâ, striis elevatis, confertis; interstitiis, striulis minimis radiantibus, decussatis; margine ventrali magis minusve convexo; dorsali anticè brevi, subretuso et paulo declivi, posticè subrecto et valdè declivi; latere antico paululum longiore, ad extremitatem rotundato-obtusum; latere postico angulato; natibus acutis; lunulâ ligamentoque infosso magnis; flexurâ costâque umbonali satis conspicuis; dentibus lateralibus subremotis, subæquidistantibus.

Rounded-ovate, thick, rather inequilateral, convex or subventricose, white both within and without, not glossy, with concentric elevated crowded striæ decussated by minute interstitial radiating striulæ; ventral edge more or less convex; dorsal short subretuse and but little sloping in front, nearly straight and considerably sloping behind; anterior side very slightly the longer, obtusely rounded at its termination; posterior side angulated; beaks acute; ligament sunken, and as well as the lunule, large; fold and flexure tolerably strong; lateral teeth rather and nearly equally distant.

Australia, &c.

85. *TELLINA CAPSIDES* (pl. lxii. f. 185.) *Lam.* no. 44; *Hanl.* Des. Cat. p. 70.

T. testâ obovato-subtrigonâ, solidâ, subæquilaterali, convexius-

culâ, vix nitidâ, intus extusque albâ aut albidâ; concentricè striatâ, striis posticè elevatioribus, anticè a lineis radiantibus distinctis decussatis; margine ventrali subarcuato; dorsali utrinque valdè declivi, anticè convexo, posticè recto aut subrecto; extremitate anticâ rotundatâ; latere postico angulato; flexurâ costâque umbonali satis distinctis; ligamento magno, infosso; dentibus lateralibus distinctis, remotis, validis, subæquidistantibus.

Obovate-subtriangular, solid, subequilateral, moderately convex, scarcely glossy, white or whitish, anteriorly decussated by closely radiating and concentric striæ, posteriorly with the concentric striæ more distant and more elevated; ventral edge subarcuated; dorsal slopes strong, the posterior nearly straight and roughened by the edges of the concentric sulci; posterior tip angulated; beaks acute; anterior extremity rounded; ligament sunken, and large; fold and flexure moderate; inside white; lateral teeth strong, subequidistant.

Jimaimalan, Isle of Negros, &c.; (Cuming).

86. *TELLINA PERPLEXA* (pl. lx. f. 139.) *Hanley*, Zool. Proc. 1844; *T. concinna*, (?) *Ab. und Bes. Conch.* part 5. t. 5. f. 1.

*T. testâ T. ostraceæ* affinis, ovatâ autem, striisque ejus concentricis confertioribus, et supernè haud lamellosis; margine dorsali antico paululum declivi.

Very like *T. ostracea* but subovate and not triangular; the concentric striæ more crowded and not lamellar, except near the less arcuated ventral margin; the anterior dorsal edge but little sloping.

Bay of Manila and Isle of Annaa; (Cuming).

87. *TELLINA OSTRACEA* (pl. lvii. f. 45.) *Lam.* no. 54; *Hanl. Des. Cat.* p. 71. sup. t. 14. f. 11; *Enc. Mèth.* t. 290. f. 13.

*T. testâ* obovato-subtrigonâ, solidiusculâ, satis convexâ, extus intusque albidâ, lineis elevatis subremotis concentricè ornatâ; interstitiis lævibus; margine ventrali subarcuato; dorsali utrinque declivi, anticè convexo, posticè recto aut subretuso; extremitate anticâ rotundatâ; latere postico paulo brevior cuneiformi; natibus acutis, prominentibus; ligamento infosso; costâ umbonali prominente; dentibus lateralibus, distinctis, postico subremoto.

Obovate-subtriangular, tolerably strong and convex, uniform white, with regular raised rather distant concentric striæ, the interstices smooth; ventral edge arcuated, sloping upward posteriorly; anterior side rather the longer, its dorsal edge convex and sloping, its extremity rounded; posterior side subrostrated and wedge-



shaped, its dorsal edge straight (or subretuse) and much sloping; beaks prominent, acute; ligament sunken; umbonal ridge very distinct; inside white; lateral teeth distinct, the hinder slightly the more distant.

Ceylon.

88. *TELLINA PLICATA* (pl. lxii. f. 191.) *Valenciennes, Enc. Mèth.* t. 287. f. 3.

T. testâ obovali, tenuiusculâ, subventricosâ, tortuosâ, æquilaterali, impolitâ, intus extusque candidâ, striis elevatis lamellosis concentricè ornatâ; margine ventrali arcuato, posticè sursum acclinato; dorsali utrinque paululum declivi, anticè convexo (sed juxta lunulam brevem distinctam incurvato), posticè convexiusculo et elevatiore; extremitate anticâ rotundatâ, obtusè biangulatâ; costâ umbonali subcarinatâ flexurâque ventrali conspicuis; ligamento longo, infosso; dentibus lateralibus parvis, antico subapproximato.

Oboval, rather thin, somewhat ventricose, tortuous, nearly equilateral, dull white, with regular raised and moderately distant concentric sublamellar striæ; the ventral margin arcuated, and rising behind; anterior side very slightly the longer, its extremity rounded, its dorsal edge near the short but distinct lunule incurved and scarcely sloping; extremity of the posterior side obtusely biangulated, its dorsal slope the more elevated slightly convex and moderately sloping; ligament elongated and sunken; umbonal ridge subcarinated, and as well as the ventral fold, very distinct; inside white; lateral teeth small, the anterior the more approximate.

Hab.? Mus. Cuming, Metcalfe.

89. *TELLINA CRYSTALLINA* (pl. lvii. f. 43.) *Chem.* vol. 11. p. 210. f. 1947, 1948; *Hanl. Des. Cat.* p. 66. t. 3. f. 10; *Wood, Gen. Conch.* p. 149.

T. testâ obovatâ, tenui, inæquivalvi, inæquilaterali, convexiusculâ, nitidâ, submargaritaceâ, candidâ, subpellucidâ, lamellis subremotis concentricis undique ornatâ; interstitiis lævibus; margine ventrali valdè arcuato, posticè brevi et incurvato; latere antico longiore, rotundato; postico brevi, rostrato; natibus acutis; ligamento minimo, infosso; costâ umbonali distinctâ; dentibus lateralibus distinctis, subæquidistantibus.

Obovate, thin, inequivalve, inequilateral, moderately convex, glossy, pure white, subnacreous, with distant regular raised concentric striæ, the interstices quite smooth; ventral edge greatly

arcuated; anterior side much the longer, rather dilated, rounded, its dorsal edge convex and not greatly sloping; posterior side terminating in a short beak, which is placed very high up owing to the shortness and small slope of the incurved dorsal edge; fold prominent; ligament minute and sunken; beaks acute; inside white; lateral teeth distinct, subequidistant.

St. Elena, West Columbia.

90. *TELLINA BURNETI* (pl. lviii. f. 99.) *Broderip* and *Sowerby*, Zool. Jour. vol. 4. p. 362. t. 9. f. 2; *Hanl. Des. Cat.* p. 72. t. 13. f. 51.

T. testâ trigonâ, suborbiculari, subtenui, subæquilaterali, inæquivalvi, compressâ, candidâ, submargaritaceâ; valvulâ planulatâ lineis elevatis concentricè striatâ; valvulâ convexiore sulcis dilatatis concentricis obsoletissimè anticè et supernè ornatâ; margine ventrali arcuato; dorsali utrinque valde declivi et dentato, anticè valdè incurvato, posticè subrecto; natibus acutissimis, anticè incumbentibus; ligamento minimo lunulâque maximâ infossis; flexurâ distinctâ; dentibus lateralibus distinctis, subæquidistantibus.

Triangular, rather thin, inequivalve, subequilateral, compressed, subnacreous, white; the convex valve with obsolete distant dilated concentric grooves, which are most visible in front and towards the elevated acute and curving beaks (one of which projects over the other); the flat valve with elevated fine rather irregular and close concentric striæ, which become obsolete posteriorly; ventral edge arcuated; dorsal edges strongly sloping on either side, and armed with large tooth-like projections, the front one greatly incurved, the hinder nearly straight; ligament minute; dorsal slopes excavated; fold and flexure distinct; lateral teeth distinct, rather remote, and subequidistant.

Salango, W. Columbia.

91. *TELLINA LYRA* (pl. lxii. f. 187.) *Hanley*, Zool. Proc. 1844.

T. testâ ellipticâ, tenui, compressâ, nitidiusculâ, intus extusque albâ, striis concentricis elevatis ornatâ; striis anticè et infernè confertioribus, interstitiis lævigatis; margine ventrali medio convexiusculo, utrinque arcuato; dorsali posticè elevatiore convexo satisque declivi, anticè prope lunulam excavatam, aut horizontali aut leviter acclivi; latere antico paululum longiore, rotundato; extremitate posticâ obtusâ; ligamento infosso; natibus acutis, prominentibus, incumbentibus; flexurâ obsoletâ; dentibus lateralibus distinctis, antico approximato, postico parvo, remotiore.

Elliptic, thin, depressed, scarcely glossy, white both within and without (sometimes subnacreous), with regular elevated concentric striæ, which are distant towards the very prominent and acute beaks, but become closer towards the ventral edge (which is rounded at both extremities, but is little convex in the middle); the interstices of the striæ quite smooth; anterior side very slightly the longer, the extremity rounded; situation of the umbonal ridge indicated by a linear carina almost adjacent to the convex and moderately sloping dorsal edge and separated from it by a narrow concavity; the beaks curved forwards; the anterior dorsal edge the less elevated, and at first running almost horizontally or even slightly ascending; lunule and nymphal area excavated; front lateral tooth distinct and subapproximate, the hinder one small and distant.

Probably inequivalve, but as yet I have only seen one of the valves.

Tumbez, Peru.

92. *TELLINA GOULDII* (pl. lvi. f. 26.) *Hanley*.

T. testâ parvâ, obliquè subovatâ, solidâ, convexiusculâ, nitidissimâ, extus intusque niveâ, lævigatâ, valdè inæquilaterali; margine ventrali anticè fortiter arcuato, posticè sursum acclinato; dorsali antico subdeclivi, prope nates acutas retuso, deinde arcuato; dorsali postico subrecto, subitoque declivi; latere postico brevissimo, obtusè angulato; extremitate anticâ rotundatâ; lunulâ parvâ; flexurâ costâque umbonali subobsoletis; ligamento minimo infosso; dente laterali antico parvo et haud approximato, postico rudimentali.

Obliquely subovate, solid, small, moderately convex, very glossy, quite smooth and both within and without of a pure white; ventral margin much arcuated in front, ascending posteriorly; front dorsal edge moderately sloping, retuse near the acute beaks and then arcuated or convex; hinder dorsal edge nearly straight and suddenly sloping; sides very unequal, the hinder peculiarly short and obtusely angulated; front extremity rounded; fold and flexure almost obsolete; ligament minute and sunken; a small lunule; front lateral tooth small and not approximate, hinder almost rudimentary.

West Indies; (Guilding).

Named in honour of the talented author of the 'Report on the Invertebrata of Massachusetts'.

93. *TELLINA RUBICUNDA* (pl. lxvi. f. 255.) *Gould*, Proc. Boston Nat. Hist. Soc. 1845.

T. testâ oblongo-ovali, inæquivalvi, compressâ, tenui, subnitidâ, inæquilaterali, pallidè aurantio-roseâ, radiis subroseis ornatâ; sublævigatâ, concentricè exiliter striolatâ, valvulâ autem alterâ sulcis remotis concentricis posticè exaratâ; margine ventrali medio subrecto; dorsali anticè convexiusculo paululumque declivi, posticè subrecto et subdeclivi; latere postico brevi, angulato; extremitate anticâ rotundato-obtusâ; ligamento prominulo; costâ umbonali subinconspicuâ; dentibus lateralibus distinctis, subæquidistantibus.

Oblong-oval, inequivalve, compressed, thin, not very glossy, inequilateral, of a very delicate salmon-colour, with light pink rays; smoothish, being merely striolated concentrically, with a posterior space grooved concentrically and distantly in one of the valves only; ventral edge straightish in the middle; dorsal slightly convex and very little sloping in front, moderately sloping and nearly straight behind; posterior side short and angulated; anterior extremity obtusely rounded; ligament moderately projecting; fold by no means conspicuous; lateral teeth distinct, and tolerably equidistant.

\*\* With a single anterior lateral tooth.

Africa, (Dr. Bates).

94. *TELLINA MARS* (pl. lxii. f. 180.) *Hanley*.

T. testâ oblongâ, solidâ, subæquilaterali, compressiusculâ, extus intusque roseâ, concentricè et confertissimè striatâ, lineisque obsoletis radiatim impressâ; margine ventrali in medio subrecto, utrinque convexo, posticè incurvato; dorsali anticè convexiusculo et vix paululum declivi, posticè prope nates obtusas excavato deinde convexo et subdeclivi; extremitate anticâ rotundatâ; latere postico obtusè acuminato, subrostrato; flexurâ costâque umbonali valdè conspicuis; ligamento infosso; dente laterali quamplurimum approximato.

Oblong, solid, nearly equilateral, rather compressed, rose-coloured within and without, decussated by very crowded concentric striæ and obsolete radiating lines; ventral edge nearly straight in the middle, convex at the sides, incurved posteriorly; dorsal edge but slightly convex and scarcely at all sloping in front, posteriorly excavated near the obtuse beaks and then convex and moderately sloping; front extremity rounded; posterior side subrostrated and obtusely acuminated; fold and flexure very conspicuous; ligament sunken; lateral tooth as approximate as possible.

The only specimen I have ever seen, (now in the possession of Mr. Cumming,) is stated to have come from Guinea.



95. *TELLINA FOLIACEA* (pl. lxiv. f. 253.) *Lin.* Sys. 1117; *Lin.* Mus. Ulr. p. 479; *Chem.* vol. 6. f. 95; *Wood*, Gen. Conch. t. 36. f. 1; *Lam.* no. 12; *Hanl. Des. Cat.* p. 62. t. 3. f. 20; *Knorr.* vol. v. t. 29. f. 2.

*T.* testâ oblongâ, tenui, planulatâ, nitidissimâ, subæquilaterali, aurantiâ, sublævigatâ, concentricè et obsoletè substriatâ, et supra carinam umbonalem alterâ in valvulâ punctis squamosis radiatâ; margine ventrali subrecto; latere antico subattenuato, rotundato; postico biangulato; margine ligamentali convexo, paululum declivi, et spinis lanceolatis armato; umbonibus valdè compressis; natibus inconspicuis; ligamento infosso; dente laterali approximato, parvo.

Oblong, thin, and flattened, very glossy, subequilateral, bright orange-yellow, nearly smooth but substriated in front with very fine concentric lines, and roughened in one valve beyond the subcarinated umbonal ridge by radiating rows of scaly dots; ventral edge nearly straight; anterior side rounded, and rather attenuated; posterior side obtusely biangulated; ligamental edge convex, but little sloping, elongated, and armed with lanceolate spines; ligament elongated and sunken; beaks not prominent; umbones much flattened, plicated; inside somewhat tinged with purple; lateral tooth small and approximate.

San Nicolas, Zebu (Cuming); Amboyna; Moluccas.

96. *TELLINA MAGNA* (pl. lxiv. f. 239, and pl. lxiii. f. 201. young.) *Spengler*, loc. cit. (1798); *T. acuta*, *Wood*, Gen. Conch. p. 157. t. 44. f. 1; *Dillw. Des. Cat.* p. 81; *Hanl. Des. Cat.* p. 63. t. 3. f. 25; *T. elliptica*, *Lam.* no. 16.

*T.* testâ oblongâ, solidâ, inæquilaterali, compressâ, nitidissimâ, lævigatâ, albidâ, pallidè aurantio supernè radiatâ (in junioribus aurantiâ, radiis angustis pallidioribus ornatâ); margine ventrali convexo, posticè sursum acclinato; dorsali anticè convexo et paululum declivi, posticè supernè subretuso satisque declivi; latere antico longiore, rotundato; postico angustato, angulato; natibus roseis, compressis; ligamento infosso; flexurâ costâque umbonali satis conspicuis; dente laterali subapproximato.

Oblong, solid, inequilateral, compressed, smooth and polished, white with pale orange rays near the umbones; the beaks compressed and rosy (in the young the surface is deep orange with narrow paler rays); ventral edge convex and rising posteriorly; anterior side the longer, rounded at the extremity, its dorsal edge more or less convex and but little sloping; posterior side narrow and angu-

lated, its dorsal edge (in the adult) retuse above and moderately sloping; ligament sunken; fold and flexure distinct; interior whitish tinged with orange; lateral tooth tolerably close.

West Indies; (Wood).

97. *TELLINA SOL* (pl. lxiv. f. 240.) *Hanley*, Zool. Proc. 1844.

T. testâ oblongo-ellipticâ, solidiusculâ, compressâ, nitidâ, rubro-aurantiâ, alterâ valvulâ concentricè substriatâ, alterâ sublævigatâ; margine ventrali convexo, posticè sursum acclinato; dorsali utrinque subdeclivi, convexiusculo; latere antico longiore, ad extremitatem rotundato; extremitate posticâ in junioribus subacuminatâ, in adultis obtusè angulatâ; natibus planulatis; ligamento infosso; dente laterali distincto.

Oblong-elliptic, tolerably strong, compressed, glossy, orange red (rayed in some specimens with paler streaks); one valve with concentric striulæ, the other nearly smooth; ventral edge simply convex, ascending posteriorly; dorsal edges moderately sloping, and slightly convex; anterior side the longer, its extremity rounded; hinder extremity somewhat acuminate in the young, obtusely angulated in the adult; beaks flattened and devoid of colour; ligament sunken; lateral tooth distinct.

Hab.?

The adult is in the cabinet of Mr. Cuming, the young in that of Mr. Metcalfe.

98. *TELLINA STRIGOSA* (pl. lxiii. f. 211.) *Gmelin*, 3239; Dillw. Des. Cat. 82; Lam. no. 19; Hanl. Des. Cat. p. 63. t. 4. f. 61; Le Vagal, *Adanson*, Seneg. t. 17. f. 19.

T. testâ ovato-oblongâ, solidâ, inæquivalvi, convexiusculâ, nitidâ, candidâ, subpellucidâ, sublævigatâ; margine ventrali subrecto, medio paululum subretuso, posticè sursum acclinato; dorsali anticè arcuato declivi et elevatiore, posticè prope nates subretuso et vix declivi, deinde convexiusculo et obliquo; latere postico longiore, ad extremitatem attenuatam subrostrato; extremitate anticâ rotundatâ; flexurâ costâque umbonali satis conspicuis; ligamento infosso; superficie internâ candidâ, plerumque roseo subradiatim tinctâ; dente laterali approximato, plerumque obsoleto.

Ovate-oblong, solid, inequivalve, moderately convex, of a glossy subpellucid white, with the marks of growth tinged with zones of violet grey, nearly smooth, but the convex valve posteriorly grooved near the beaks with most delicate but distinct crowded striæ; ventral margin somewhat retuse in the middle, rising behind; anterior side rather the shorter, its extremity rounded, its dorsal edge

arcuated; hinder extremity attenuated and subrostrated; fold and flexure distinct; the ligamental edge at first incurved, and then oblique and slightly convex; within often stained with rose colour; ligament sunken; the approximate lateral tooth almost or entirely obsolete.

Senegal.

99. *TELLINA PLANATA* (pl. lxi. f. 174.) *Lin.* Sys. 1117; Born, t. 2. f. 9; Lam. no. 20; Philip. En. Mol. Sic. vol. 1. p. 26; Hanl. Des. Cat. p. 63. t. 3. f. 24; Poli. vol. 1. t. 14. f. 1 to 5.

VAR. (?) *T. flavescens operculata*, *Chem.* vol. 6. f. 98.

*T.* testâ ovali, solidiusculâ, inæquivalvi, æquilaterali, convexiusculâ, nitidâ extus intusque albido-carneâ, sublævigatâ; margine ventrali convexiusculo, medio subrecto; dorsali anticè convexiusculo paululumque declivi, posticè subdeclivi et prope ligamentum infossum subretuso; latere antico rotundato; postico subangulato; flexurâ costâque umbonali satis conspicuis; dente laterali parvo, approximato.

Oval, tolerably strong, inequivalve, equilateral, moderately convex, nearly smooth, pale flesh colour; ventral margin moderately convex, but nearly straight in the middle; anterior side rounded, its dorsal edge convex and scarcely at all sloping; posterior extremity subangulated; the ligamental margin moderately sloping, refuse near the sunken ligament; fold and flexure tolerably distinct; inside flesh-coloured; lateral tooth small, approximate.

Mediterranean.

The shell represented by Chemnitz (vol. vi. f. 98) is probably a variety. It is slightly more elongated, with the radiating lines more distinct.

100. *TELLINA IMBELLIS* (pl. lx. f. 155.) *Hanley*, Zool. Proc. 1844.

*T.* testâ oblongo-ovali, solidâ, inæquivalvi, inæquilaterali, convexâ, nitidâ, extus intusque albidâ, valvulâ convexiore striis elevatis concentricis posticè notatâ; valvulâ alterâ lævigatâ; margine ventrali convexo, posticè sursum acclinato; dorsali anticè convexiusculo paululumque declivi, posticè magis minusve declivi et subretuso; latere antico producto, rotundato; postico brevi, obtusè angulato; flexurâ costâque umbonali obsoletis; ligamento prominente; dente laterali parvo, approximato.

Oblong-oval, solid, inequivalve, inequilateral, convex, rather glossy, whitish (inside white), smooth, excepting upon the posterior side of the more convex valve, which is finely striated by raised

concentric lines; ventral margin convex and rising behind; anterior side produced, its dorsal edge tolerably convex and but little sloping; posterior side short and obtusely angulated; ligamental edge straightish or subretuse, more or less sloping; ligament prominent; fold and flexure obsolete; lateral tooth small, approximate.

Hab.?

The unique specimen which I purchased without a locality, is now in the possession of H. Cuming, Esq.

101. *TELLINA MERA* (pl. lxvi. f. 268.) *Say*, Amer. Conch. pl. 64. f. 2.

T. testâ ovato-suborbiculari, inæquilaterali, convexâ aut convexiusculâ, vix nitidâ, haud solidâ, extus intusque albâ, lineis exilibus elevatis concentricè asperatâ; margine ventrali convexo et posticè sursum subacclinato; dorsali utrinque declivi, anticè convexo, posticè subrecto; latere postico brevior, et inferne obtusissimè angulato; extremitate anticâ rotundatâ; natibus acutis; ligamento subinfosso; flexurâ costâque umbonali haud conspicuis; dente laterali haud magno, haud approximato.

Rounded ovate, moderately inequilateral, more or less convex, not solid nor highly polished, white both within and without, most delicately striated by raised concentric lines, (which however are scarcely visible in the young); ventral margin convex, and somewhat rising posteriorly; dorsal edges sloping, the front one more or less straight, the hinder decidedly convex; posterior side the shorter, very obtusely angulated below; anterior side rounded; beaks acute; ligament rather sunken; fold and flexure just evident; lateral tooth neither large nor approximate.

Guayaquil; south coast of U. States.

102. *TELLINA CYCLADIFORMIS* (pl. lvii. f. 61.) *Hanley*, Zool. Proc. 1844.

T. testâ rotundato-subtrigonâ, tenui, ventricosâ, intus extusque incarnatâ aut pallidè roseâ, sublævigatâ, aut concentricè tenuissimè striolatâ; margine ventrali convexo; dorsali utrinque declivi, convexiusculo; latere antico rotundato, paulo brevior; extremitate posticâ obtusè subangulatâ; ligamento prominulo; flexurâ costâque umbonali obsoletis; dente laterali parvo, approximato.

Small, subtriangularly orbicular, thin, ventricose, nearly smooth, (or marked with most minute concentric striæ), both within and without of a pale rose or flesh-colour; ventral edge convex, both dorsal edges sloping and moderately curved; anterior side rather the shorter, rounded; hinder extremity obtusely subangulated;



ligament tolerably large, and somewhat prominent; fold and flexure obsolete; lateral tooth small, approximate.

San Nicolas, Zebu.

103. *TELLINA LISTERI* (pl. lxxv. f. 251.) *Hanley*, Zool. Proc. 1844; *Lister*, Hist. Conc. t. 288. f. 235; *T. scutra Gould*, Proc. Boston Nat. H. Soc.

*T. testâ* obovatâ, solidâ, ventricosâ, (anticè subventricosâ), æquilaterali, glabrâ, extus intusque candidâ; margine ventrali medio subrecto; dorsali anticè arcuato paululumque declivi, posticè recto et declivi; latere antico dilatato, obtusè rotundato; posticè obtusissimè biangulato; ligamento magno, infosso; natibus obtusis; umbonibus plerumque subplanulatis; flexurâ costâque umbonali satis distinctis; dente laterali parvo subapproximato.

Obovate, solid, more or less ventricose, equilateral, white both externally and internally, almost smooth, (being merely marked with the concentric wrinkles of growth), rather glossy; the ventral edge nearly straight in the middle; the anterior side dilated, its extremity obtusely rounded, its dorsal edge scarcely sloping and much arcuated; hinder extremity most obtusely biangulated, the dorsal edge straight and much sloping; umbonal ridge and ventral flexure not very conspicuous; ligament large and sunken; umbones rather flattened; beaks obtuse; lateral tooth small, and nearly approximate.

Senegal.

104. *TELLINA INÆQUALIS* (pl. lvii. f. 44.) *Hanley*, Zool. Proc. 1844.

*T. testâ* subovatâ, valdè inæquilaterali, solidâ, convexâ, candidâ, tenuiter striatâ; striis supernè obliquis, infernè concentricis, flexuosis; supra costam umbonalem inconspicuam, rugis erectis flexuosis asperatâ; margine ventrali convexissimo; dorsali anticè subincurvato et valdè declivi, posticè brevi recto subdeclivi; latere antico producto, ad extremitatem attenuato, rotundato; extremitate posticâ obtusâ; natibus acutis; lunulâ distinctâ; superficie internâ candidâ, aut flavescente; dente laterali magno, subremoto.

Subovate, very inequilateral, solid, convex, white with fine striæ, which are oblique near the acute beaks, but become concentric and flexuous towards the very convex ventral margin; the surface beyond the umbonal ridge (which is not prominent), covered with elevated flexuous oblique wrinkles, which project so as to form three radiating lines; anterior side produced, attenuated but rounded at the extremity, its dorsal line rather concave and greatly

sloping; hinder side very short, its extremity obtuse but slightly angulated above, its dorsal edge moderately sloping; beaks acute; a distinct lunule; inside yellowish; lateral tooth moderately distant.

Ceylon.

105. *TELLINA PUMILA* (pl. lvii. f. 41.) *Hanley*, Zool. Proc. 1844.

*T. testâ T. Philippinarum* simillimâ, sed angustiore; margine ventrali medio subrecto; dorsali utrinque recto aut subconcavo, anticè paululum declivi; margine antico recto, verticali; latere postico cuneiformi.

Bearing a very close resemblance to *T. Philippinarum*, but decidedly narrower; both dorsal edges (except in the young) straight or even concave, and the front one which is longer and less sloping than in the next species, forming an angle with the straight and direct anterior margin; the hinder extremity wedge-shaped, the ventral margin (which is nearly straight in the middle) not being elevated posteriorly.

Valparaiso.

106. *TELLINA PHILIPPINARUM* (pl. lvii. f. 55, 56.) *Hanley*, Zool. Proc. 1844.

*T. testâ* ovatâ aut subovatâ, tenui, subæquilaterali, intus extusque candidâ, (sæpe umbones versus incarnatâ aut pallidè aurantiâ), submargaritaceâ, concentricè et tenuissimè striatâ; margine ventrali arcuato, posticè sursum acclivi; dorsali anticè brevi recto subdeclivi, posticè declivi et convexiusculo; extremitate anticâ obtusâ; latere postico subcuneiformi, aut obsoletè subangulato; ligamento prominulo; concavitate dorsali anticâ lunulam simulante; dente laterali subapproximato, (in junioribus subobsoleto).

Ovate or subovate, thin, subequilateral, rather depressed, whitish (with a pearly gloss), often tinged near the beaks with flesh-colour or pale orange, most delicately striated concentrically; ventral edge arcuated, inclining upward towards the posterior side, which varies from subcuneiform to obsoletely subangulated; anterior side very slightly the longer, its dorsal edge slightly sloping and not convex, its extremity obtuse; an obsolete lunule; a distinct subapproximate lateral tooth which is nearly obsolete in the young.

Philippines.

107. *TELLINA CULTER* (pl. lvii. f. 51.) *Hanley*, Zool. Proc. 1844.

T. testâ parvâ, ovatâ, inæquilaterali, tenuiusculâ, convexâ, nitidâ, intus extusque aurantio-roseâ, lævigatâ; margine ventrali anticè arcuato, posticè sursum acclivi; dorsali anticè magis minusve convexo satisque declivi; latere antico producto, ad extremitatem obtusè rotundato; postico acuminato; natibus acutis; ligamento vix prominulo; costâ umbonali ferè et flexurâ ventrali omnino obsoletis; dente laterali parvo, approximato.

Small, ovate, inequilateral, thinnish, tolerably convex, both externally and internally of a rosy-orange, nearly smooth, in young specimens there are indications of concentric striæ near the arcuated front of the ventral edge, which latter ascending posteriorly in nearly a straight line, acuminates the short anterior side at its junction with the straight and much sloping ligamental margin; front dorsal edge always convex and not greatly sloping, extremity obtusely rounded; ligament scarcely prominent; ventral flexure entirely obsolete, umbonal ridge nearly so; beaks acute; lateral tooth small, approximate.

Mindanao, Philippines.

108. *TELLINA CORBULOIDES* (pl. lvii. f. 50, 57.) *Hanley*, Zool. Proc. 1844.

T. testâ subovali, inæquivalvi, solidâ, subventricosâ, sublævigatâ, roseo-incarnatâ, epidermide tenuissimâ et opali coloribus nitente indutâ; margine ventrali sinistrae valvulae ultra marginem convexiusculum alterius prominente; margine dorsali anticè convexiusculo et declivi, posticè subrecto et valdè declivi; latere antico brevior, obtusè acuminato; extremitate posticâ rotundatâ; ligamento prominulo; areâ dorsali posticâ in adultis planulatâ; natibus obtusis; flexurâ ventrali distinctâ; superficie internâ plerumque aurantio-rubrâ; dente laterali parvo, approximato.

Var. *b*. Oblongâ; margine ventrali subrecto; flexurâ obsoletâ.  
Var. *c*. Extus intusque candidâ.

Suboval, inequivalve, solid, nearly smooth, more or less ventricose, covered when fresh with a very thin opalescent epidermis, under which the shell is dull, and of a rosy flesh colour; ventral edge moderately convex and in the left valve projecting beyond that of the right; anterior side shorter, and obtusely acuminated, its dorsal edge nearly or quite straight and much sloping; hinder side rounded, its dorsal edge convex and moderately sloping; hinder dorsal area flattened in the adult; beaks obtuse; ventral flexure distinct; inside usually orange-red; a single small approximate lateral tooth.

Var. *b*. Oblong, the ventral edge nearly straight; flexure obsolete. Var. *c*. Entirely white.

Catbalonga, Philippines, and Bay of Manila (var. *b*.).

109. *TELLINA RHODORA* (pl.lix. f.105.) *Hinds*, Zool. Sulphur, vol. 2. t. 21. f. 3. p. 67.

T. testâ oblongo-triangulari, solidâ, convexâ aut subventricosâ, subæquilaterali, nitidissimâ, lævi, extus intusque albido-roseâ, marginibus roseis; margine ventrali convexiusculo, et anticè convexo; dorsali utrinque subrecto, anticè subdeclivi; latere postico brevior, cuneiformi; extremitate anticâ obtusè rotundatâ; flexurâ subobsoletâ; ligamento depresso; dentibus primariis parvis; laterali antico maximo et subapproximato, postico rudimentali et subremoto.

Oblong-triangular, solid, rather ventricose, nearly equilateral, perfectly smooth and glossy, within and without of a pale pink, becoming rose-coloured near the margins; ventral edge convex in front, dorsal edges nearly straight, the anterior one scarcely sloping; hinder side the shorter, wedge-shaped; front extremity obtusely rounded; ligament depressed; primary teeth small, front lateral close and very large, a rudimentary remote hinder one.

Straits of Macassar.

110. *TELLINA FELIX* (pl. lviii. f. 52.) *Hanley*, Zool. Proc. 1844.

T. testâ subovali, solidiusculâ, valdè inæquilaterali, convexiusculâ, nitidâ, intus extusque roseâ, lævigatâ; margine ventrali vix convexiusculo; dorsali anticè vix declivi convexo, posticè valdè declivi; latere postico brevissimo, obtusè subtruncato, infernè obtusè angulato; extremitate anticâ rotundatâ; costâ umbonali et flexurâ ventrali subobsoletis; ligamento brevi, prominulo; dente laterali magno, approximato.

Suboval, tolerably strong, very inequilateral, slightly convex, both within and without of a glossy rose-colour, quite smooth; the ventral edge nearly straight; the anterior side produced and rounded, its dorsal edge convex and little sloping; hinder side extremely short, and obtusely but rather obliquely subtruncated; umbonal ridge and fold, nearly obsolete; ligament rather prominent; a single large approximate lateral tooth.

Panama.

111. *TELLINA HILARIS* (pl. lvii. f. 54.) *Hanley*, Zool. Proc. 1844.



T. testâ oblongo-cuneiformi, tenui, compressiusculâ, inæquilaterali, nitidâ, lævi, intus extusque roseâ, albo biradiatâ; radiis latis submediis; margine ventrali convexiusculo (flexurâ obsoletâ); dorsali anticè vix convexiusculo et subdeclivi, posticè subrecto et valdè declivi; extremitate lateris antici longioris rotundatâ; extremitate posticâ brevi, cuneiformi; dente laterali parvo, subapproximato.

Oblong-wedge-shaped, thin, rather compressed, inequilateral, glossy, smooth, rosy both within and without, with an anterior and posterior subcentral broad white ray; ventral margin slightly convex and devoid of flexure; anterior side the longer, its extremity rounded, its dorsal edge scarcely convex and little sloping; hinder extremity short and wedge-shaped, the ligamental edge nearly straight; the lateral tooth small and nearly approximate.

Red Sea (M. Clery.)

112. *TELLINA HIBERNA* (pl. lvii. f. 53.) *Hanley, Zool. Proc.* 1844.

T. testâ oblongâ, solidâ, compressiusculâ, valdè inæquilaterali, subnitidâ, extus intusque candidâ, lævigatâ; margine ventrali subrecto; dorsali anticè convexiusculo et paululum declivi, posticè primum convexo deinde subincurvato; latere antico producto rotundato; postico brevi, cuneiformi; flexurâ subobsoletâ; ligamento prominulo; dente laterali, magno, approximato.

Oblong, solid, rather compressed, very inequilateral, rather glossy, white both within and without, smooth; ventral edge straightish; front dorsal margin slightly convex and scarcely sloping, hinder one first convex and then somewhat incurved; anterior side produced and rounded; posterior short and wedge-shaped; flexure nearly obsolete; ligament rather prominent; lateral tooth large, approximate.

Panama; Bay of Guayaquil.

113. *TELLINA POLITA* (pl. lvii. f. 60.) *Say, Jour. Ac. N. S. Philad.* 2. p. 276.; *Say, Amer. Conch. t.* 65. f. 2.; *Hanl. Des. Cat.* p. 65. *Sup. t.* 9. f. 39.

T. testâ *T. Teneræ* affini, minus autem inæquilaterali; extremitate posticâ acutâ, cuneiformi; margine ligamentali, recto.

Allied to *T. Tenera*, but less inequilateral, the ligamental edge straight, and the hinder extremity acute and wedge-shaped.

Massachusetts to Georgia, North America.

114. *TELLINA TENERA* (pl. lvii. f. 59.) *Say, Jour. Ac. N. Sc. Philad.* 2. p. 303.; *Hanl. Des. Cat.* p. 65. *sup. t.* 9. f. 38.; *Gould Invert. Massa.* f. 44. p. 68.

T. testâ oblongo-ovali, tenui, inæquilaterali, compressiusculâ, nitidâ, intus extusque candidâ, submargaritaceâ, sublævigatâ; margine ventrali convexiusculo; dorsali anticè subrecto paululumque declivi, posticè declivi et vix convexiusculo; latere antico producto, rotundato; extremitate posticâ obtusè cuneiformi; flexurâ obsoletâ; ligamento prominulo; dente laterali distincto, approximato.

Oblong-oval, thin, inequilateral, rather compressed, and both within and without of a nacreous white, nearly smooth or with delicate and almost obsolete concentric striæ; ventral edge moderately convex; dorsal straightish and but little sloping in front, slightly convex and decidedly sloping behind; anterior side produced and rounded; posterior extremity very obtusely wedge-shaped; flexure obsolete; ligament slightly prominent; lateral tooth distinct and approximate.

North America.

115. *TELLINA INCARNATA* (pl. lx. f. 142. pl. lxvi. f. 265.) *Lin. Syst.* 1118; (from his collection); *Poli. l. t. 15. f. 1.*; *T depressa Lam.* no. 22.; *Wood Gen. Con. t. 45. f. 3*; *Philip. En. Moll. Sic. l. p. 27*; *Hanl. Des. Cat. p. 63. t. 4. f. 48*; *Turt. Biv. Brit. p. 105. t. 8. f. 6*; *T. squalida Mont. Test. Brit. p. 56.*

T. testâ oblongo-ovali, subtenui aut solidiusculâ, subcompressâ, subæquilaterali, subnitidâ, albido-aurantiâ and roseo-aurantiâ, concentricè substriatâ, striis alterâ in valvulâ obsoletis; margine ventrali convexo; dorsali anticè convexiusculo paululumque (in junioribus vix minimè) declivi, posticè subrecto aut subretuso et subdeclivi; latere antico longiore, rotundato; extremitate anticâ angulatâ subrostratâ; flexurâ satis distinctâ; ligamento infosso; coloribus superficiei internæ plerumque saturationibus; dente laterali subapproximato.

Oblong-oval, rather thin or but moderately strong, somewhat compressed, subequilateral, more or less glossy, of a pale orange or deep flesh colour, with (in the young chiefly,) two whitish approximate posterior rays, concentrically substriated in one of the valves; ventral edge convex; anterior side rounded and rather the longer its dorsal edge slightly convex and but little sloping; posterior extremity angulated and subrostrated; the ligamental edge straightish or subretuse and moderately sloping; ligament sunken; fold and flexure tolerably distinct; internal colouring usually darker; lateral tooth subapproximate.

Britain, and Mediterranean.

116. *TELLINA VALTONIS* (pl. lvii. f. 68.) *Hanley, Zool. Proc.* 1844.

T. testâ subovali, tenui, compressâ, subæquilaterali, nitidâ, albido-roseâ radio angusto pallidiore (nonnunquam duobus) posticè ornatâ, sublævigatâ, pellucidâ, anticè rotundatâ; margine ventrali convexiusculo; dorsali utrinque convexiusculo, posticè declivi, anticè subdeclivi; latere postico paululum brevior, obtusè cuneiformi; flexurâ costâque umbonali obsoletis; ligamento prominulo; dente laterali parvo, approximato.

Suboval, thin, compressed, subequilateral, pink with one or two narrow posterior whitish rays, nearly smooth, glossy, pellucid, rounded in front, rather shorter and obtusely wedge-shaped behind; ventral and dorsal edges tolerably convex, very moderately sloping in front, but more so behind; fold and flexure quite obsolete; ligament moderately prominent; lateral tooth small, approximate.

Hab. ? Mus. Metcalfe.

117. *TELLINA EXILIS* (pl.lix. f.104.) *Lam.* no.26; *Deshayes*, *Ency. Mèth.* vol.iii. p.1013; *Hanl. Des. Cat.* p. 64. sup. t. 13. f. 2; *Deles.* t. 6. f. 6.

T. testâ subovali, tenuissimâ, compressâ, nitidâ, inæquilaterali, pellucidâ, roseâ, radio uno vel altero posticè ornatâ, minutissimè striatâ; striis anticè concentricis, medio obliquis; margine ventrali subrecto; dorsali anticè convexiusculo et subdeclivi, posticè subrecto et declivi; latere postico cuneiformi et paulo brevior; extremitate anticâ rotundatâ; flexurâ costâque umbonali obsoletis; ligamento prominulo; dente laterali parvo, subapproximato.

Suboval, very thin, pellucid, compressed, rose-coloured, with two narrow white posterior rays, nearly smooth being only marked with very delicate and almost imperceptible regular striae, which, concentric in front, become oblique on reaching the middle of the shell; ventral margin nearly straight; anterior side rather the longer, rounded, its dorsal edge not much sloping and slightly convex; posterior end wedge-shaped, the ligamental edge nearly straight; fold and flexure obsolete; ligament moderately prominent; lateral tooth small, approximate.

Hab. ? Mus. Walton.

118. *TELLINA VIRGO* (pl. lvii. f. 42.) *Hanley*, *Zool. Proc.* 1844.

T. testâ subovali, tenuissimâ, compressiusculâ, inæquilaterali, nitidâ, pellucidâ, candidâ, striis obliquis subremotis regularibus ornatâ; margine ventrali subrecto; dorsali anticè convexo et subdeclivi, posticè subrecto et declivi; latere antico longiore,

rotundato; extremitate posticâ obtusè cuneiformi; flexurâ costâque umbonali subobsoletis; ligamento satis prominente; dente laterali distincto, subapproximato.

Suboval, inequilateral, rather compressed, very thin, pellucid, white, with regular and not very close oblique striæ; ventral edge nearly straight; dorsal margin more or less convex and not greatly sloping in front, nearly straight and moderately sloping behind; anterior side the longer, rounded; posterior extremity obtusely wedge-shaped; ligament moderately prominent; fold and flexure obsolete; lateral tooth distinct, subapproximate.

Chiriqui, West Columbia.

119. *TELLINA SIMILIS* (pl. lvii. f. 65.) *Sowerby*, Brit. Miscel. pl. 75; Mont. Test. Brit. Sup. p. 167; Turt. Biv. Brit. p. 102; Philip. Ab. und Bes. Conch. part 9. pl. 5. f. 7.

T. testâ subovali, solidiusculâ, inæquilaterali, convexâ, nitidâ, extus intusque albidâ, concentricè et oblique striatâ; striis obliquis, minutis, confertissimis; ultimâ parte posticâ alterâ in valvulâ sublævigatâ, in alterâ autem striis subimbricatis haudque confertis concentricè exaratâ; margine ventrali subrecto; dorsali anticè convexiusculo, posticè brevi subretuso, utrinque paululum declivi; latere antico longiore, rotundato; extremitate posticâ obtusè biangulatâ; costâ umbonali satis conspicuâ; ligamento prominente; dente laterali magno, approximato.

Suboval, moderately strong, inequilateral, convex, glossy, whitish both within and without, with a few concentric and crowded minute oblique striæ, which do not extend to the obtuse hinder extremity, but are replaced before reaching the distinct umbonal ridge, by not very close subimbricated striæ (obsolete in one of the valves); ventral edge straightish; dorsal not greatly sloping on either side, convex in front, short and retuse behind; anterior side the longer, rounded; ligament prominent; lateral tooth large, approximate.

West Indies.

120. *TELLINA DECORA* (pl. lvi. f. 27., lix. f. 127., and lxvi. f. 260.) *Say*, Jour. Acad. Philad. vol. v.

T. testâ *T. simili* simillimâ, sed minore, magis convexâ, magis inæquilaterali, radiis angustis roseis ornatâ; margine cardinali roseo sub ligamento.

Very like a young *Similis* (of which it may possibly prove a variety), but decidedly more convex than specimens in that stage, and when adult much more inequilateral than full grown shells of



the preceding species; delicately coloured by narrow lighter or darker tinged crimson rays, and the hinge margin stained with rose-colour beneath the ligament; ventral edge decidedly convex.

Honduras (Dyson); Florida.

121. *TELLINA IRIS* (pl. lxvi. f. 267.) *Say*, Jour. Ac. Nat. Sc. Philad. vol. ii.

*T. testâ subovatâ, solidiusculâ, valdè inæquilaterali, nitidâ, satis convexâ, extus intusque albidâ, anticè radio subluteo obsolete pictâ, striisque obliquis confertis utrâque in valvulâ insculptâ; margine ventrali anticè subarcuato, posticè sursum acclinato; dorsali utrinque convexiusculo, anticè declivi, posticè valdè declivi; extremitate anticâ rotundatâ; latere postico brevi, cuneiformi; flexurâ costâque umbonali subinconspicuis; dentium lateralium antico subapproxinato, postico subobsoleto.*

Subovate, tolerably strong, very inequilateral, moderately convex, glossy, white both within and without, with a yellowish anterior indistinct ray at the umbones, and very distinct and numerous oblique striae, which in both of the valves reach even to the but little prominent umbonal ridge; ventral edge subarcuated in front, and rising posteriorly; dorsal edges moderately convex, sloping, the hinder one particularly so; front extremity rounded; posterior side short and wedge-shaped; front lateral tooth distinct and rather close, hinder almost obsolete.

Carolina to Georgia, United States.

Very closely resembling *T. similis* from which it may be distinguished by the much greater slope of its dorsal edges, its pointed posterior termination, the greater extension of its oblique striae, and the presence of a second (though indistinct) lateral tooth. Mr. Say adds, "it has *generally* a rosaceous disk and one or two posterior (*i. e.* anterior) rays."

122. *TELLINA IRIDESCENS* (pl. lviii. f. 88.); *Sanguinolaria*, *Benson*, Annals Nat. Hist. 1842. vol. ix.

*T. testâ oblongâ, solidiusculâ, nitidâ, subæquilaterali, convexiusculâ, lævigatâ, albido-aurantiâ (intus aurantiâ), epidermide tenuissimâ subirridescente indutâ; margine ventrali subrecto; dorsali anticè subrecto paululumque declivi, posticè vix convexo et valdè declivi; extremitate anticâ rotundatâ; latere postico, vix brevior, cuneiformi; ligamento haud prominente; flexurâ costâque umbonali obsoletis; dente laterali parvo, approximato.*

Oblong, moderately strong, tolerably convex, subequilateral, smooth, glossy, pale orange, covered by a very thin slightly irri-

descent epidermis; ventral edge nearly straight; anterior side slightly the longer, rounded at its extremity, its dorsal edge scarcely convex and strongly sloping; ligament not prominent; fold and flexure obsolete; inside orange, a single small approximate lateral tooth.

Chusan, China.

I have received the species from Dr. Philippi with the proposed name of *T. carnea*, but know not whether he has subsequently published it.

123. *TELLINA FABULA* (pl. lvii. f. 62.) *Gmelin*, 3239; *Donov. Brit. Shells.* vol. iii. t. 97; *Wood, Gen. Conch.* p. 156. t. 45. f. 4; *Lam. no. 24*; *Philip. En. Mol. Sic.* p. 26; *Hanl. Des. Cat.* p. 64. t. 3. f. 23.

*T. testâ* ovato-oblongâ, tenui, compressâ, nitidâ, extus intusque candidâ, subæquilateralî, anticè rotundatâ, posticè cuneiformi; valvulâ alterâ lævigatâ; margine ventrali subrecto, posticè sursum acclinato; dorsali anticè subdeclivi et convexo, posticè declivi et juxta ligamentum prominens retuso, deinde magis minusve convexo; flexurâ obsoletâ; dente laterali approximato, distincto.

Ovate-oblong, thin, compressed, glossy, white within and without, nearly equilateral, rounded in front, wedge-shaped behind; one valve smooth, the other with crowded oblique striæ; ventral edge nearly straight, and rising posteriorly; front dorsal margin moderately sloping and convex, posterior one declining and near the prominent ligament retuse, but afterwards more or less convex; lateral tooth approximate, distinct.

Britain, Europe.

*T. fragillissima* of Chemnitz, vol. vi. f. 101, (*T. vitrea* of *Gmelin*), is usually considered as a bad representation of this species.

124. *TELLINA TENUIS* (pl. lviii. f. 81, 82.) *Da Costa*, *Brit. Conch.* p. 210. *Wood. Gen. Conch.* p. 155. t. 44. f. 3, 4.; *Mont. Tes. Brit. 1.* p. 59.; *Lam. no. 25.* *Hanl. Des. Cat.* p. 64. t. 3. f. 22.; *Philip. En. Mol. Sic. 1.* p. 27.; *T. balaustina*, *Dillw. D. Cat.* p. 93.

*T. testâ* ovali, tenuiusculâ, compressâ, nitidissimâ, subæquilateralî, intus extusque albâ, aurantiâ aurantio-rubrâ aut roseâ, lævigatâ; margine ventrali anticè convexo, posticè sursum acclinato; dorsali anticè convexo subdeclivi, posticè declivi et juxta ligamentum prominens retuso; latere antico paulo longiore, rotundato; antico obtusè angulato; flexurâ costaque umbonali subinconspicuis; dente laterali minimo, approximato.

Var. (*T. exigua*, *Poli.* Test. Sicil. 1. t. 15. f. 15, 17.) testâ abbreviatâ et ideirco margine dorsali utrinque magis declivi; flexurâ omnino obsoletâ.

Oval, thinnish, compressed, extremely glossy, subequilateral, smooth both within and without, of an orange, white, orange-red, yellow or rose colour; the ventral edge convex in front, straightish and ascending behind; anterior side rather the longer, rounded, its dorsal edge moderately sloping; posterior extremity obtusely angulated; ligamental edge sloping, at first retuse, then rather convex; ligament prominent; fold and flexure not quite obsolete; lateral tooth very small, approximate.

Var. Shortened, the dorsal edges consequently more sloping; the flexure quite obsolete.

Britain, Europe.

I agree with Dr. Philippi, in regarding the *T. hyalina* of Deshayes (Exped. Morea, t. 18. f. 12, 13, 14.), as a narrow variety of this very variable shell.

125. *TELLINA JUVENILIS* (pl. lvii. f. 63.) *Hanley*, Zool. Proc. 1844.

*T. testâ* ovatâ, subtrigonâ, tenui, pellucidâ. compressiusculâ, nitidâ, rubro-aurantiâ, lævigatâ, inæquilaterali; margine ventrali convexo aut convexiusculo; dorsali anticè subrecto et declivi, posticè convexo et valdè declivi; latere antico longiore, subattenuato, rotundato; postico brevi, et obtusè subcuneiformi; flexurâ costâque umbonali subobsoletis; ligamento satis conspicuo; dente laterali parvo.

Subtriangularly ovate, inequilateral, thin, pellucid, slightly compressed, smooth, glossy, orange-red; ventral margin more or less convex; anterior side the narrower, rounded at the extremity, its dorsal edge nearly straight; posterior extremity short, and obtusely wedge-shaped, the ligamental edge being convex and abruptly sloping; ligament distinct; fold and flexure almost entirely obsolete; lateral tooth small.

Philippines.

126. *TELLINA LUX* (pl. lvii. f. 71.) *Hanley*, Zool. Proc. 1844.

*T. testâ* subovali, tenui, pellucidâ, compressâ, nitidâ, aurentiâ, sublævigatâ, inæquilaterali; margine ventrali convexiusculo; dorsali utrinque subdeclivi, anticè convexiusculo, posticè brevi et incurvato; latere postico brevior, obtusissimè biangulato; extremitate anticâ obtusè rotundatâ; flexurâ costâque umbonali obsoletis; ligamento prominente; dente laterali approximato, distincto.

Somewhat oval, thin, pellucid, compressed, inequilateral, nearly smooth, and of an uniform glossy orange-flesh colour; the ventral margin moderately convex; the dorsal but little sloping on either side, but moderately convex in front, incurved and short behind; anterior extremity obtusely rounded; the posterior side much the shorter, and very obtusely biangulated; fold and flexure obsolete; ligament prominent; lateral tooth distinct and approximate.

Philippines.

127. *TELLINA VERNALIS* (pl. lviii. f. 84.) *Hanley*, Zool. Proc. 1844.

*T. testâ subovali, tenuissimâ, compressiusculâ, pellucidâ, nitidissimâ, lævi, valdè inæquilaterali, albido-rosçâ, utrinque rotundatâ; margine ventrali convexiusculo, anticè sursum acclinato; dorsali utrinque paululum convexiusculo, posticè declivi, anticè vix minimè declivi; latere antico producto, postico brevi; flexurâ obsoletâ; dente laterali minimo, subapproximato.*

Somewhat oval, extremely thin and pellucid, slightly compressed, very inequilateral, uniform glossy pink, rounded at both extremities; margins slightly convex, the ventral rising in front, the anterior dorsal scarcely sloping; flexure obsolete; anterior side short and cuneiform; lateral tooth minute and nearly approximate.

Singapore.

128. *TELLINA INSCULPTA* (pl. lx. f. 136.) *Hanley*, Zool. Proc. 1844.

*T. testâ oblongo-elongatâ, solidiusculâ, compressâ, æquilateralî, extus intusque candidâ; sulcis confertis concentricè exaratâ, striisque tenuissimis radiantibus (præsertim posticè) decussatâ; ultra costam umbonalem subobsoletam subsquamosâ; margine ventrali elongato, subrecto; dorsali utrinque subrecto, subdeclivi; extremitate posticâ subbiangulatâ; flexurâ ventrali distinctâ; dente laterali quamplurimum approximato.*

Elongated-oblong, tolerably solid, compressed, equilateral, externally and internally white, with concentric crowded sulci, and most minute posterior radiating striulæ; beyond the almost obsolete umbonal ridge, the surface roughened by small scales or interrupted delicate lamellæ; ventral edge nearly straight, and much elongated; dorsal margins nearly straight and but moderately sloping; hinder extremity somewhat biangulated; ventral flexure distinct; lateral tooth extremely approximate.

Chiriqui, W. Columbia.



129. *TELLINA PSAMMOTELLA* (pl. lx. f. 134.) *Lamarck*, no. 30.  
*Hanl. Des. Cat.* p. 65. sup. t. 14. f. 6.

T. testâ oblongo-ovali, subtenui, convexiusculâ, nitidâ, extus intusque pallidâ, lævi, inæquilaterali; margine ventrali convexiusculo; dorsali utrinque subdeclivi, subrecto; latere antico producto, subattenuato, rotundato; extremitate posticâ obtusè biangulatâ; ligamento satis prominente; flexurâ obsoletâ; dente laterali distincto, subapproximato.

Oblong-oval, inequilateral, rather thin, moderately convex, glossy, smooth, both within and without of a very pale dull orange yellow; ventral margin moderately convex; dorsal edges but moderately sloping, and nearly straight; anterior side produced, rounded, and rather attenuated; ligament moderately prominent; flexure obsolete; lateral tooth distinct, approximated.

Hab. (?) Mus. Cuming and Walton.

130. *TELLINA (TELLINIDES) EMARGINATA* (pl. lvii. f. 70.) *Sow.*  
*Tankerv. Cat. App.* p. 3; *Hanl. Des. Cat.* p. 74. sup. t. 13, f. 55.

T. testâ oblongâ, tenui, subinæquivalvi, convexiusculâ, nitidâ, pallidâ, radio brevi rubro-aurantio utrinque ad umbones notatâ, lævigatâ, valdè inæquilaterali; margine ventrali subrecto, anticè sursum acclinato; dorsali anticè recto et subdeclivi, posticè convexo et valdè declivi; latere antico producto, rotundato, attenuato; extremitate posticâ brevi, obtusâ, emarginatâ; flexurâ obsoletâ; dente laterali distincto, approximato.

Oblong, rather inequivalve, tolerably convex, glossy, very pale orange, with a short deeper tinged ray on either side of the beaks, smooth, subpellucid, very inequilateral, produced rounded and attenuated in front, obtuse short and emarginated behind; ventral and anterior dorsal edges nearly straight, the latter not much sloping; posterior dorsal much sloping and convex beyond the ligament; flexure obsolete; lateral tooth distinct, approximate.

Singapore.

The Oblonga of Gmelin, (p. 2314. from Chemnitz, vol. 6. f. 87.) may possibly prove to be this or the preceding, but the resemblance is not sufficiently exact for identification, the figure bearing a greater resemblance to *Cumana*, or *Aurora*, but the description of the teeth by no means coinciding with the hinge of either.

131. *TELLINA (TELLINIDES) TRUNCATULA* (pl. lvii. f. 69.)  
*Sowerby*, *Tankerv. Cat. App.* p. 3; *Hanl. Des. Cat.* p. 73.

T. testâ T. Vestali simillimâ, sed fulvo-aurantiâ, valdè compressâ, et magis inæquilaterali; extremitate posticâ emarginatâ; margine dorsali postico subretuso, hand autem excavato.

Very like Vestalis, but more compressed and inequilateral, of a tawny orange, with the hinder extremity clearly notched, and the posterior dorsal edge not at all excavated, but simply and slightly retuse.

Ilo Ilo, Isle of Panay, Philippines (Cumings.)

132. *TELLINA VESTALIS* (pl. lvii. f. 67.) *Hanley*, Zool. Proc. 1844.

T. testâ oblongo-angustâ, tenuissimâ, convexiusculâ, nitidâ, lævi, intus extusque nivêâ, inæquilaterali; margine ventrali subrecto, paululum convexiusculo, anticè sursum acclinato; dorsali anticè minimè declivi et paululum convexiusculo, posticè prope ligamentum excavato, deinde convexo et subdeclivi; extremitate lateris anticæ longioris rotundatâ; extremitate posticâ subemarginatâ, subattenuatâ, obtusè biangulatâ; flexurâ obsoletâ; dente laterali approximato.

Elongated-oblong, extremely thin, slightly convex, inequilateral, smooth, glossy, snowy white both within and without; ventral margin but very slightly convex, and somewhat rising in front; anterior side rather the longer, its extremity rounded, its dorsal edge scarcely convex and hardly at all sloping; hinder dorsal edge excavated at the ligament, afterwards convex and slightly sloping; posterior extremity rather attenuated, slightly emarginated, and obtusely biangulated; flexure obsolete; the lateral tooth approximate.

Isles of Negros and Luzon, Philippines.

133. *TELLINA LANCEOLATA* (pl. lviii. f. 86, 87.) *Chemnitz*, vol. vi. p. 111. f. 103; Wood, Gen. Conch. p. 167. t. 45. f. 2; Hanl. Des. Cat. p. 67. t. 4. f. 40; *Psammotæa pellucida*, *Lam.* no. 4; Deles. t. 5. f. 10.

T. testâ oblongo-elongatâ, tenui, compressâ, nitidiusculâ, æquilaterali, roseâ aut albido-roseâ, concentricè et confertissimè striatâ, anticè rotundatâ, posticè lanceolatâ; margine ventrali subrecto; dorsali utrinque convexiusculo, anticè subhorizontali, posticè subdeclivi; costâ umbonali conspicuâ; ligamento satis prominente; costellâ internâ ex umbonibus posticè radiante; dente laterali distincto, subapproximato.

Elongated oblong, equilateral, thin, compressed, rather glossy,

rose-coloured or white with a rosy tinge; concentrically striated, the striæ extremely close; ventral edge nearly straight; dorsal but moderately convex on either side, nearly horizontal in front, and not greatly sloping behind; anterior extremity rounded; posterior lanceolate; ligament tolerably prominent; fold conspicuous; an internal posterior radiating riblet; the lateral tooth distinct, subapproximate.

Isle of Negros, Philippines (Cuming).

134. *TELLINA HYALINA* (pl. lxi. f. 167.) *Gmelin*, 3235; Dillw. Des. Cat. p. 85; Hanl. Des. Cat. p. 67. t. 4. f. 39; *T. complanata pellucida*, *Chem.* vol. vi. f. 99.

*T. testâ oblongâ, inæquivalvi, tenuissimâ, compressâ, valdè inæquilaterali, nitidâ, albidâ, subpellucidâ, lævigatâ; margine ventrali convexo et posticè acclivi; dorsali posticè subrecto vixque declivi, anticè arcuato et declivi; latere antico perbrevis, rotundato; postico producto, rotundato, attenuato; natibus inconspicuis; ligamento infosso; flexurâ obsoletâ; costellis duabus internis posticè radiantibus; dente laterali quamplurimum approximato.*

Oblong, inequivalve, very thin, much compressed, very inequilateral, of a brilliant smooth semi-transparent white; the ventral margin convex and rising behind; the hinder area of the dorsal edge, which is but slightly convex and not greatly sloping posteriorly, and sloping and arcuated anteriorly, flattened; anterior side short and rounded; posterior side produced, rounded, and attenuated; ligament sunken; beaks not prominent; fold obsolete; two internal rib-like lines radiating from the hinge posteriorwards; the lateral tooth almost touching the primary ones.

The only perfect specimen I have ever beheld of this extremely rare shell, belongs to Dr. Bates, who most courteously forwarded it from the United States, for my inspection.

135. *TELLINA (TELLINIDES) TIMORENSIS* (pl. lxi. f. 158, 172) *Lamarck*, *Anim. sans vert.* vol. v.

*T. testâ oblongâ, tenuiusculâ, subæquilaterali, compressiusculâ, nitidâ, subpellucidâ, extus intusque candidâ (nonnunquam marginibus roseo tinctis) concentricè substriatâ, anticè rotundatâ, posticè attenuatâ et supernè obtusè angulatâ; margine ventrali subrecto; dorsali utrinque subrecto et subdeclivi, anticè paululum convexiusculo, posticè subretuso; flexurâ costâque umbonali obsoletis; ligamento magno, prominente; dente laterali, approximato.*

Oblong, rather thin and semi-transparent, nearly equilateral, rather compressed, both within and without of a glossy white

which is often tinged with yellow and rarely with rose-colour at the margins, concentrically substriated; the ventral edge nearly straight, and usually very indistinctly inflated behind; anterior side slightly the shorter, rounded at the extremity; posterior side rather attenuated, and obtusely angulated above; dorsal edges scarcely sloping and nearly straight, the front being very slightly convex, the hinder somewhat retuse; ligament large and prominent; umbonal ridge and fold quite obsolete; teeth distinct and generally tinged with rose-colour, the lateral one approximate.

Isle of Negros, Philippines; &c.

136. *TELLINA CONSPICUA* (pl. lviii. f. 100.) *Hanley*.

T. testâ *T. Timorensi* simillimâ, sed abbreviatâ, et ovali-subtrigonâ; margine dorsali utrinque magis declivi, posticè convexiusculo.

Very like *Timorensis*, but not so elongated; the dorsal edges much more sloping, and the front one not retuse.

This may eventually prove but a young variety of *Sinuata*, but the only specimen I have ever seen (purchased with this name attached, and now in the collection of Mr. Cuming) has been pronounced distinct by every Conchologist who has inspected it.

137. *TELLINA SINUATA* (pl. lxiii. f. 203.) *Spengler*, loc. cit.; *Tellinides Timorensis*, *Sow.* Gen.; *Reeve*, *Conch. Syst.* t. 56. f. 2; *Young*, *T. nivea*, *Wood*, *Gen. Conch.* p. 177. t. 46. f. 1; *Dillwyn*, *D. Cat.* p. 89; *Index Test.* t. 4. f. 92.

T. testâ subovali, solidiusculâ, inæquilaterali, compressiusculâ, nitidâ, extus intusque albidâ, concentricè striolatâ, striisque obliquis anticis infernè decussatâ; margine ventrali subrecto, posticè sinuoso; dorsali anticè brevi subrecto declivi, posticè incurvato vixque declivi; extremitate posticâ latâ, rotundatâ; anticâ obtusâ; costâ umbonali obsoletâ; ligamento magno, prominente; dente laterali approximato.

Oval, rather oblique, tolerably strong, and somewhat compressed, glossy, whitish, with concentric striulæ which are decussated in front by fine raised oblique and rather distant ones; ventral edge sinuated posteriorly, and somewhat swollen in the middle; anterior side clearly the shorter, its extremity obtuse, its dorsal edge nearly straight and moderately sloping; posterior extremity obtuse, rounded below, but forming a rounded-off angle with the short concave and scarcely sloping dorsal margin; ligament large and prominent; umbonal ridge obsolete; inside white, teeth as in the last, but *never* tinged with rose-colour.



Closely allied to *Timorensis*, but differs in shape, sinuosity, and the decided inequality of its sides. The anterior oblique striæ, which in some specimens extend along the ventral edge posteriorward, are rarely present in that species.

Tranquebar; Sumatra.

138. *TELLINA TRIANGULARIS* (pl. lx. f. 150.) *Chemnitz*, vol. vi. p. 96. f. 85; Dillwyn, D. Cat. p. 79; Desh. ed. Lam. vol. vi. p. 209; *Tellinides triangularis*, *Hanl.* Des. Cat. p. 74. t. 4. f. 33; *Tellinides politus* *Sow.*, *Tanker*. Cat. App. p. 4; *T. trilatera*, *Gmel.*; *T. obliqua*, *Lam.* no. 47.

*T.* testâ ovato-trigonâ, inæquilaterali, solidiusculâ, compressâ, nitidissimâ, sub epidermide flavescente-candidâ, anticè et prope marginem ventralem convexum concentricè striatâ, alterâque in valvulâ striis flexuosis obliquis posticè ornatâ; margine dorsali anticè brevi et arcuato, posticè subrecto et producto; extremitate posticâ obtusè acuminatâ; anticâ rotundatâ; ligamento prominente; flexurâ nullâ; dente laterali approximatisimo.

Ovate-triangular, tolerably solid, compressed, inequilateral, both internally and externally white, the epidermis yellowish and very glossy; with concentric striæ in front, and towards the convex ventral margin which rises a little behind; anterior side rounded, its dorsal edge convex; posterior side produced and obtusely acuminated, the dorsal edge nearly straight and very oblique; ligament prominent; flexure obsolete; the lateral tooth quite close to the beaks.

Moluccas? Mus. Cuming, &c.

139. *TELLINA (TELLINIDES) ACUMINATA* (pl. lx. f. 141.) *Hanley*, Des. Cat. p. 73. sup. t. 13. f. 53.

*T.* testâ elongatâ, subovatâ, solidiusculâ, valdè inæquilaterali et inæquivalvi, compressâ, politâ, lævigatâ, extus intusque albidâ aut albido-aurantiâ; margine ventrali subarcuato; dorsali anticè subarcuato satisque declivi, posticè elongato subrecto et declivi; latere antico breviorè, rotundato; postico valdè producto, acuminato, ad extremitatem rotundato; ligamento infosso; flexurâ costâque umbonali obsoletis; dente laterali approximato.

Elongated, subovate, moderately strong, very inequilateral and inequivalve, both valves compressed, but one much shallower than the other; smooth, polished, both within and without of a pale orange becoming white towards the subarcuated ventral edge; anterior side the shorter, rounded, its dorsal edge arched and moderately sloping; posterior side much produced, acuminated,

with the tip rounded, the dorsal edge nearly straight, moderately sloping, and very long; ligament sunken; umbonal ridge and flexure obsolete; lateral tooth approximate.

Hab.? Mus. Britannicum.

140. *TELLINA PLANISSIMA* (pl. lix. f. 124. and pl. lxii. f. 197.)  
*Anton*, Verzn. Conch. p. 4; *Ab. und Bes. Conch.* part 5. t. 5. f. 2;  
*Tellinides rosea*, *Sow.* Gen. Shells, f. 1; *Reeve*, Conch. Syst. t. 56.  
 f. 1.

T. testâ ovatâ, tenuiusculâ, inæquivalvi, inæquilaterali, compressâ, extus intusque roseâ, concentricè substriatâ; margine ventrali convexiusculo; dorsali utrinque declivi, anticè convexo, posticè subrecto; latere antico rotundato; postico longiore, rotundato-cuneiformi; ligamento prominente; flexurâ subobsoletâ; costellâ internâ in valvulâ complanatâ posticè radiante; dente laterali parvo, approximato.

Var. Candida.

Ovate, rather thin, inequivalve, inequilateral, compressed, rose-coloured both within and without, concentrically substriated; ventral margin moderately convex, the flexure not quite obsolete; dorsal edges sloping, the anterior convex, the posterior nearly straight; anterior extremity rounded; posterior side the longer and of a rounded wedge-shape; ligament prominent; an internal rib radiating posteriorward in the flattened valve; lateral tooth small, approximate.

Var. Quite white.

Moluccas.

The *Opalina* of Chemnitz is closely allied to, if not identical with, the white variety of this shell.

141. *TELLINA (TELLINIDES) PURPURASCENS* (pl. lxii. f. 194.)  
*Broderip* and *Sowerby*, Zool. Jour. vol. iv. p. 363; *Hanl. Des. Cat.*  
 p. 74. sup. t. 9. f. 18; *Zool. Beechey's Voy.* t. 42. f. 2.

T. testâ oblongo-ovali, tenui, compressâ, nitidiusculâ, subæquilaterali, roseo-purpurascente, pellucidâ, striis radiantibus et concentricis confertissimè decussatâ; margine ventrali convexiusculo; dorsali utrinque paululum declivi, anticè convexiusculo, posticè subrecto; latere antico minimè longiore, rotundato; extremitate posticâ subangulatâ, submarginatâ; ligamento prominente; flexurâ omnino obsoletâ; dente laterali approximato.

Oblong-oval, thin, compressed, rather glossy, nearly equilateral, purplish-rose coloured, pellucid, decussated by most crowded radiating and concentric striæ; ventral margin moderately convex;

dorsal but little sloping on either side, slightly convex in front, nearly straight behind; anterior side very slightly the longer, rounded; posterior extremity subangulated, subemarginated; ligament prominent; flexure quite obsolete; lateral tooth approximate.

Real Leijos, Central America (Cuming).

142. *TELLINA* (*TELLINIDES*) *OVALIS* (pl. lx. f. 147.) *Sowerby*, Tank. Cat. App. p. 3; *Hanl. Des. Cat.* p. 73. sup. t. 13. f. 56; *T. tridentata*? *Anton*, in *Wiegman. Arch.* 1837.

*T. testâ* ovali, tenuissimâ, pellucidâ, subæquilaterali, compressâ, nitidâ, rosâ, radiis angustis albidis frequentibus ornatâ, concentricè substriatâ; margine ventrali convexiusculo; dorsali utrinque paululum declivi; latere antico longiore, rotundato; extremitate posticâ obtusâ, aliquantulum latiore; flexurâ costâque umbonali obsoletis; natibus inconspicuis; ligamento prominente; dente laterali approximato, distincto.

Oval, pellucid, subequilateral, compressed, extremely thin, concentrically substriated, and variegated with crowded narrow whitish rays on a rose-coloured ground; the ventral margin slightly convex; the dorsal but little sloping on either side, the ligament edge slightly retuse; posterior extremity obtusely rounded, and rather broader than the rounded termination of the more elongated anterior side; fold and flexure obsolete; beaks not prominent; ligament projecting; a distinct approximate lateral tooth.

Moluccas; San Nicolas, Zebu; (Cuming).

The *Solen striatus*, of Gmelin (from Chemnitz, vol. vi. f. 57, 58.), seems closely allied if not identical.

143. *TELLINA COCCINEA* (pl. lviii. f. 90.) *Chemnitz*, vol. vi. p. 118. f. 109; *Dillw. Des. Cat.* p. 87; *Tellinides coccinea. Hanl. Des. Cat.* p. 74. t. 4. f. 42.

*T. testâ* ovali, tenuissimâ, compressâ, æquilaterali, pellucidâ, roseo-purpurascente, utrinque rotundatâ; concentricè striatâ, striis anticis frequentibus, posticis remotis et subimbricatis; margine ventrali convexiusculo; dorsali utrinque paululum declivi; flexurâ costâque umbonali obsoletis; ligamento prominente; costellis duabus internis (in junioribus) posticè radiantibus; dentibus primariis subobsoletis, dente laterali approximato, distincto.

Oval, compressed, very thin, equilateral, of an uniform pellucid purple-rose colour, with concentric striæ which are crowded in front, but distant and subimbricated behind; the ventral edge moderately convex; the dorsal but little sloping on either side of

the little prominent beaks; extremities rounded and nearly equally broad; the fold and flexure obsolete; the ligament prominent; two rather indistinct internal rib-like lines radiating (in the young only) posteriorward; cardinal teeth nearly obsolete, the approximate anterior lateral very distinct (when young).

San Nicolas, Zebu (Cuming).

144. *TELLINA RHODON* (pl. lviii. f. 93.) *Hanley*, Zool. Proc. 1844.

T. testâ oblongâ, tenuissimâ, compressiusculâ, nitidissimâ, lævi, roseâ, pellucidâ, valdè inæquilaterali, utrinque rotundatâ; margine ventrali convexiusculo, anticè sursum acclivi; dorsali anticè convexiusculo et vix declivi, posticè subdeclivi; latere postico brevi subattenuato; natibus inconspicuis; flexurâ costâque umbonali obsolete; dente laterali approximato.

Oblong, very inequilateral, extremely thin, rather compressed, smooth, polished, and of an uniform purplish rose-colour; the ventral margin slightly convex, and rising in front; the dorsal but slightly convex on either side, scarcely sloping in front, but moderately so behind; the extremities rounded, and the shorter posterior side somewhat attenuated; beaks not prominent; the fold and flexure obsolete; lateral tooth approximate.

Hab.? Mus. Cuming.

145. *TELLINA OUDARDI* (pl. lxvi. f. 262.) *Payraud*. Cat. Corse, p. 40. t. 1. f. 16, 17, 18; Desh. ed. Lam. vol. vi. p. 210; Haul. Des. Cat. p. 65. sup. t. 14. f. 8.

"T. testâ ovatâ, compressâ, nitidâ, pellucidâ, obliquè cancellatâ, lineis transversis albis parvulisque longitudinalibus rubris ornatâ; anticè et posticè radiis luteo-rubrescentibus; intus et extus rubrâ.

Ovate, compressed, glossy, transparent, obliquely cancellated, adorned with transverse white lines and small longitudinal red ones; rays of a yellowish red both in front and behind; red both within and without."

I have been obliged to content myself with reprinting the original description, and giving a representation of the typical shell deposited in the Museum at Paris, as I am unable to procure a specimen in England for the purpose of comparison. Had it not been for the mention of sculpture on the surface of one of its valves, I should have doubted its distinctiveness as a species. "The valves are furnished with transverse striæ in lozenges, accompanied by a multitude of silvery-white little rays both which are crossed by very delicate longitudinal lines of a deeper red than the



ground-colour of the shell." There seems from the drawing to be but a single anterior moderately distant lateral tooth, and no *external* appearance of rays in the front of the shell. The sculpture must indeed be minute, to have escaped the attention (as it has) of our very accurate artist.

146. *TELLINA SUBROSEA* (pl. lvii. f. 64.) *Hanley*.

T. testâ oblongâ, tenuissimâ, compressâ, valdè inæquilaterali, roseâ, pellucidâ, lævi, nitidâ, posticè brevior et obtusè cuneiformi, anticè obtusâ aut rotundatâ; margine ventrali subrecto; dorsali anticè paululum declivi, posticè declivi, utrinque subrecto aut convexiusculo; flexurâ inconspicuâ; dente laterali subobsoleto, approximato.

Oblong, extremely thin, compressed, smooth, pellucid, rosy, very inequilateral and highly glossed; ventral margin straightish; dorsal edges straightish or but slightly convex, very slightly sloping in front, moderately so behind; anterior extremity rounded or obtuse; posterior side the shorter and obtusely wedge-shaped; flexure very inconspicuous; lateral tooth approximate and almost obsolete.

Catbalonga, Isle of Samar, soft mud; (Cuming).

The specimens closely resemble the young of the *Punicea* group, but both locality and dentition are adverse to this conclusion. They appear, however to be scarcely adult.

147. *TELLINA MARGARITINA* (pl. lxvi. f. 257.) *Lam.* no. 18; *Deless. Rec.* t. 6. f. 4.

T. testâ ovali, tenui, pellucidâ, nitidâ, margaritaceâ; latere antico (postico) attenuato.

Oval, thin, transparent, glossy, nacreous white, front (hinder) side attenuated.

New Holland.

The representation of the species in Delessert's magnificent folio, enables me to refer this shell to the present division. I am unable, however, to add a more lengthened description than the very meagre outline furnished in the '*Animaux sans vertèbres*'. The only specimens I have ever seen were the original types of the French Museum; but they sufficed to convince me of the clear distinctness of the species from any possessing a similar dentition.

\* \* Devoid of lateral teeth.

148. *TELLINA Cumana* (pl. lviii. f. 73.) *Psammobia Cumana*,

*Costa* Cat. Test. Sicil. 20. t. 2. f. 7.; *Tellina Costæ Philip.* En. Mol. Sic. 1. p. 28. t. 3. f. 11.

T. testâ ovatâ aut ovali-oblongâ, tenuiusculâ, inæquilaterali, valdè convexâ, subnitidâ, lævigatâ, extus intusque albidâ, umbonibus hyalinis et plerumque pallidè aurantiis; margine ventrali satis convexo; dorsali utrinque subrecto, posticè satis, anticè paululum declivi; latere antico longiore ad extremitatem rotundato; postico angustato, obtusè subtruncato; natibus acutis, et rectè incurvatis; costâ umbonali satis distinctâ, haud autem conspicuâ; ligamento infosso; dentibus parvis.

Varying from ovate to oval-oblong, rather thin, inequilateral, not very glossy, smooth, both within and without whitish, with the umbones usually hyaline and often tinged with orange; ventral edge moderately convex, but not arcuated; dorsal edges nearly straight, sloping behind, and but moderately so in front; anterior side the longer and rounded at its termination; posterior side narrowed, and obtusely subtruncated; beaks acute and not inclining to either side; ligament sunken, umbonal ridge not prominent but tolerably evident; teeth small.

Very closely resembling *Plebeia*, but proportionally more ventricose, with the ventral edge less arcuated, &c.

Mediterranean.

149. *TELLINA PLEBEIA* (pl. lix. f. 129, and f. 151.) *Hanley*, Zool. Proc. 1844.; *Psammobia lævigata* (?) *Lamarck*.

T. testâ subovatâ, solidiusculâ, convexâ, subnitidâ, lævigatâ, intus extusque, albidâ, umbonibus hyalinis et rubro-aurantiis; margine ventrali convexo aut subarcuato; dorsali anticè prope nates recto et paululum declivi, posticè recto satisque declivi; latere antico longiore, rotundato; extremitate posticâ obtusè angulatâ; ligamento infosso; costâ umbonali conspicuâ; flexurâ obsoletâ. Var. *Ovatâ*; costâ umbonali minus conspicuâ; umbonibus sæpe albidis.

Subovate, tolerably strong, convex, not very glossy, smooth, both within and without whitish, with the umbones hyaline and orange-red; ventral edge convex or subarcuated; anterior side the longer, rounded, its dorsal edge straight and scarcely sloping near the beaks; posterior extremity obtusely angulated, the ligamental edge straight and sloping; ligament sunken; flexure obsolete.

Var. (from Africa) ovate, the ventral edge more regularly arcuated, the fold less prominent, and the umbones often colourless.

Real Leijos, Central America; Senegal.

150. *TELLINA UMBONELLA* (pl. lvi. f. 13.) *Lamarck*, no. 48.  
*Hanl. Des. cat.* p. 70.

T. testâ obovali, solidiusculâ, subinæquilaterali, convexâ aut convexiusculâ, subimpolitâ, extus intusque albidâ, umbonibus hyalinis et roseo tinctis, epidermide tenui fugaci cinerascente indutâ, lævigatâ; margine ventrali convexo aut subarcuato; dorsali utrinque subrecto et paulo declivi; latere antico paulo longiore, rotundato; postico subangulato; natibus haud prominentibus; ligamento infosso; costâ umbonali obsoletâ; dentibus minimis.

Oboval, tolerably strong, slightly inequilateral, merely convex, not glossy, both within and without whitish under a thin ashy epidermis, with the beaks somewhat hyaline and tinged with rose-colour, smooth or with a few antiquated lines; ventral edge decidedly convex; the dorsal edges but little sloping, and nearly straight; anterior side rather the longer, rounded at its extremity; posterior side subangulated; ligament sunken; beaks not prominent; umbonal ridge obsolete; teeth minute.

Very like *Plebeia* in all but the shape, which is much more elongated in that species.

Port Lincoln, Australia.

151. *TELLINA NOBILIS* (pl. lx. f. 143.) *Hanley, Zool. Proc.* 1844.

T. testâ ovali, solidiusculâ, convexâ, inæquilaterali, nitidissimâ, intus extusque rosâ, lævigatâ; margine ventrali convexiusculo medio plerumque subrecto; dorsali anticè convexiusculo et vix declivi, posticè subdeclivi et subrecto aut convexiusculo; latere antico longiore, ad extremitatem obtusè rotundato; postico obtusè angulato; natibus obtusis; flexurâ costaque umbonali subobsoletis; ligamento prominulo; dentibus parvis.

Oval, tolerably strong, convex, inequilateral, very glossy, smooth, rosy within and without; ventral edge moderately convex; dorsal tolerably convex and scarcely sloping in front, moderately sloping and varying from straightness to slight convexity behind; anterior side the longer, obtusely rounded at its extremity; posterior side obtusely angulated; fold and flexure nearly obsolete; ligament rather prominent; beaks obtuse; teeth small.

Luzon, Philippines.

152. *TELLINA LUCERNA* (pl. lviii. f. 98.) *Hanley, Zool. Proc.* 1844.

T. testâ oblongâ, solidiusculâ, subventricosâ, nitidiusculâ, lævigatâ, albidâ, umbonibus aurantiis, anticè longiore et rotundatâ, posticè obtusè cuneiformi, margine ventrali subrecto; dorsali pos-

ticè declivi, anticè paululum declivi, utrinque subrecto; flexurâ obsoletâ; ligamento subinfosso; disco interno aurantio.

Oblong, tolerably solid, rather ventricose, slightly glossy, smooth, whitish, with the umbones orange, anteriorly longer and rounded, posteriorly obtusely wedge-shaped; ventral and dorsal edges straightish, the latter posteriorly sloping, anteriorly scarcely sloping; flexure obsolete; ligament rather sunken; inner disc orange.

Isles of Negros, Mindanao, and Panay.

153. *TELLINA AURORA* (pl. lviii. f. 76.) *Hanley, Zool. Proc.* 1844.

T. testâ T. *Psammotellæ* simillimâ, convexiore autem, et umbonibus rubro-aurantiis; ligamento infosso; dentibus lateralibus nullis.

Very like T. *Psammotella* but more convex, and with the umbones of an orange-red. The ligament too is sunken and the hinge devoid of lateral teeth.

Panama.

154. *TELLINA GALATÆA* (pl. lxiv. f. 223.) *Psammobia Galatæa* *Lam.* no. 18; *Hanl. Des. Cat.* p. 58. sup. t. 13. f. 44. T. *Sericina* *Jonas*, *Ab. und. Bes. Conch.* part 3. t. 5. f. 1.

T. testâ oblongâ, solidiusculâ, convexâ, valdè inæquilaterali, subnitidâ, extus intusque candidâ, punctis minutissimis elevatis confertis radiatim asperatâ; margine ventrali subrecto; dorsali anticè subhorizontali, posticè brevi recto et declivi; latere antico producto, rotundato; extremitate posticâ truncato-cuneiformi; ligamento infosso; flexurâ obsoletâ; dentibus parvis.

Var. (T. *Diana*, *Zool. Proc.* 1844.) subovatâ, punctis obsoletis; margine dorsali utrinque magis declivi; extremitate posticâ magis obtusâ.

Oblong, tolerably strong, convex, very inequilateral, rather glossy, white within and without, roughened by crowded radiating rows of minute raised dots; ventral edge nearly straight; anterior side produced, rounded at the extremity; dorsal edge convex and nearly horizontal; posterior side of a truncated wedge-shape; the ligamental edge straight, short, and much sloping; ligament sunken; flexure obsolete; teeth very small.

Var. Subovate, the dots obsolete; dorsal edges more sloping; posterior end more obtuse.

China.

155. *TELLINA CANDIDA* (pl. lxii. f. 195.) *Psammotæa candida* *Lam.* no. 6. *Hanl. Des. Cat.* p. 60.



*T. testâ elongato-oblongâ, subæquivalvi, maximè inæquilaterali, extus intusque candidâ, lævigatâ, convexâ aut subventricosâ; margine ventrali posticè convexiusculo, anticè arcuato et sursum acclinato; dorsali anticè convexiusculo paululumque declivi, posticè retuso et valdè declivi, extremitate anticâ rotundato-attenuatâ; latere postico brevissimo, obtusè cuneiformi; ligamento subinfosso; costâ umbonali subobsoletâ; dentibus minimis.*

Elongated-oblong, subequivalve, extremely inequilateral, white both within and without, convex or subventricose, smooth, with however obsolete radiating lines, and very indistinct striulæ towards the ventral margin, which latter is straightish behind, but curves upward in front, so as somewhat to attenuate the rounded anterior extremity; front dorsal edge scarcely at all sloping, rather convex; posterior side very short and obtusely wedge-shaped, the dorsal edge retuse and decidedly sloping; ligament rather sunken; fold nearly obsolete; teeth minute.

China (?) *Mus. Metcalfe.*

Very closely allied to *Galatæa*, but narrower, more convex, and utterly devoid of those radiating lines of raised dots, which are so characteristic of that species. The posterior extremity is more regularly cuneiform, and the anterior termination more attenuated.

156. *TELLINA ELONGATA* (pl. lxii. f. 199.) *Hanley, Zool. Proc.* 1844.

*T. testâ elongatâ, angustâ, tenuiusculâ, satis convexâ, extus intusque candidâ, lævigatâ, valdè inæquilaterali; margine ventrali medio subretuso, anticè obliquè arcuato; dorsali anticè subhorizontali et subrecto, posticè subdeclivi et subretuso; extremitate lateris antici longioris obtusâ posticâ acuminato-truncatâ; ligamento infosso; flexurâ obsoletâ; dentibus parvis.*

Elongated, narrow, thinnish, moderately convex, smooth, white, very inequilateral; ventral edge rather retuse in the middle, and obliquely arcuated anteriorly; anterior side the longer, its extremity obtuse, its dorsal edge almost horizontal and nearly straight; hinder extremity with a truncated acumination, the ligamental edge slightly incurved and moderately sloping; flexure obsolete; ligament sunken; inside white; teeth small.

Chiriqui, West Columbia.

157. *TELLINA ASSIMILIS* (pl. lviii. f. 95.) *Hanley, Zool. Proc.* 1844.

*T. testâ T. elongatæ simillimâ, convexiore autem, et latere postico obtusè cuneiformi paululumque subrostrato.*

Closely resembling a young *Elongata*, but more convex, and the hinder side obtusely wedge-shaped and slightly beaked; the hinder extremity not in the slightest degree truncated, but the ligamental edge sweeping to the lower margin in a concave and then convex curve.

Luzon, Philippines.

158. *TELLINA LILIUM* (pl. lviii. f. 85.) *Hanley*, Zool. Proc. 1844.

T. testâ ovato-oblongâ, tenuiusculâ, convexâ aut subventricosâ, extus intusque albâ; concentricè substriatâ, striis supra costam umbonalem elevatis; margine ventrali subrecto anticè sursum acclinato; dorsali anticè subrecto paululumque declivi, posticè valdè declivi et prope ligamentum prominulum recto deindeque convexo; extremitate lateris antici producti infernè et obliquè rotundatâ; extremitate posticâ brevi, cuneiformi.

Ovate-oblong, rather thin, convex or subventricose, white both within and without, with concentric striulæ, and obsolete radiating lines, which latter are most perceptible in the younger specimens, the striulæ elevated upon and beyond the tolerably distinct fold; anterior side produced, its dorsal edge nearly straight, and scarcely sloping, its extremity obliquely rounded near the straight ventral margin; posterior side short and wedge-shaped; the ligamental edge straight, but convex at the extremity; ligament small, and moderately prominent.

Isles of Burias and Negros, Philippines.

159. *TELLINA TENTA* (pl. lxvi. f. 266.) *Say*, Am. Conch. t. 65. f. 3; Gould, Invert. Massach. p. 68. f. 43.

T. testâ oblongâ, tenuissimâ, subflexuosâ, convexiusculâ, extus intusque albidâ, lævigatâ, valdè inæquilaterali; margine ventrali subrecto; dorsali anticè convexo (aut subarcuato) et paululum declivi, posticè retuso et subdeclivi; latere postico brevi, ad extremitatem angustato et paululum subrostrato; extremitate anticâ rotundatâ; costâ umbonali subinconspicuâ; ligamento parvo, prominente; superficie internâ lineis radiantibus ornatâ; dentibus minimis.

Oblong, very thin, rather flexuous, moderately convex, whitish, very inequilateral, very nearly if not quite smooth, ventral margin straightish; front dorsal edge convex or subarcuated, and very little sloping; hinder one retuse and moderately sloping; posterior side short, narrowed and very slightly beaked at its termination, the tip truncated or subemarginated; anterior end rounded; fold

not very conspicuous; ligament small, projecting; inside whitish, and distinctly marked with radiating lineoles; teeth very small.

Boston.

160. *TELLINA ANCILLA* (pl. lviii. f. 94.) *Hanley*, Zool. Proc. 1844.

T. testâ oblongo-elongatâ, tenuiusculâ, satis convexâ, nitidissimâ, extus intusque candidâ, concentricè substriatâ, lineisque obsoletis radiantibus ornatâ; striis supra costam umbonalem subobsoletam remotioribus, distinctis, subimbricatis; margine ventrali subrecto; dorsali anticè subdeclivi et convexiusculo, posticè subrecto et declivi; extremitate lateris antici producti rotundatâ; latere postico brevior, obtusè cuneiformi.

Elongated-oblong, thinnish, moderately convex, very glossy, pure white both within and without, with concentric striulæ, which are most perceptible at the nearly straight ventral margin, and become subimbricated distinct and rather distant upon and beyond the almost obsolete fold; anterior side produced, its extremity rounded, its dorsal edge slightly convex and not much sloping; posterior side obtusely wedge-shaped, ligamental edge straightish, tip rounded.

Lord Hood's Island.

161. *TELLINA BODEGENSIS* (pl. lix. f. 102.) *Hinds*, Zool. Sulphur, vol. ii. t. 21. f. 2. p. 67.

T. testâ oblongo-elongatâ, inæquilaterali, solidiusculâ, compressâ, nitidâ, extus intusque candidâ, concentricè et subimbricatum sulcatâ; margine ventrali subrecto, anticè sursum acclinato; dorsali utrinque subrecto, anticè vix minimè declivi; latere postico brevior, cuneiformi; extremitate anticâ rotundatâ; flexurâ obsoletâ; ligamento satis prominente; dentibus lateralibus nullis.

Elongated-oblong, inequilateral, rather solid, compressed, of a glossy ivory white, with regular moderately distant concentric subimbricated sulci, (which in the only specimen I have ever seen disappear in one valve at the posterior end); the ventral margin nearly straight, rising in front, the anterior dorsal scarcely at all sloping; posterior side the shorter, wedge-shaped; front extremity rather obtusely rounded; fold and flexure obsolete; ligament moderately projecting; inside white; no lateral teeth.

Russian Bodejas.

162. *TELLINA RHOMBOIDES* (pl. lviii. f. 92, 96, 97.) *Quoy* and *Gaim.*, Voy. Ast. Zool. vol. iii. p. 502. t. 81. f. 4-7; T. *clathrata*,

*Desh.* Lam. vol. vi. p. 208; *Hanl. Des. Cat.* p. 65. sup. t. 14. f. 12.

T. testâ ovali-oblongâ, solidiusculâ, valdè inæquilaterali, magis minusve convexâ, subnitidâ, albidâ, pallidè luteâ, aurantiâ aut albido-roseâ, striis anticè concentricis et medio obliquis confertim ornatâ; margine ventrali subrecto aut paululum convexo; dorsali anticè subrecto et paululum declivi, posticè satis declivi; extremitate lateris antici producti obtusè rotundatâ; extremitate posticâ magis minusve obtusè cuneiformi; ligamento prominente; flexurâ vix perspicuâ.

Var. Pallidè luteâ, radiis angustis roseis; striis obliquis majoribus et fortioribus.

Oval-oblong, very inequilateral, tolerably strong, more or less convex, rather glossy, whitish pink, pale yellow, or orange, with very delicate striæ, which are concentric in front but become oblique in the middle; ventral edge straightish, or not much convex; anterior side produced, its extremity rounded, its dorsal edge straightish and but little sloping; posterior side rather variable in shape, but short, and more or less obtusely wedge-shaped; ligament prominent; flexure not quite obsolete.

Var. Pale yellow with narrow rosy rays, the oblique striæ larger and stronger.

Isles of Zebu and Ticao, Philippines, (Cuming).

163. *TELLINA FORMOSA* (pl. lviii. f. 83.) *Hanley*, Zool. Proc. 1844.

T. testâ obovatâ, solidiusculâ, nitidâ, convexiusculâ, subpellucidâ, albidâ, radiis interruptis roseis striisque minutis obliquis confertis undique ornatâ; margine ventrali convexo; dorsali utrinque convexiusculo, anticè subdeclivi, posticè valdè declivi; extremitate lateris antici producti rotundatâ, lateris postici brevissimi obtusissimè angulatâ; natibus roseis; ligamento parvo et satis prominente; flexurâ subobsoletâ.

Obovate, moderately strong, glossy, scarcely convex, somewhat pellucid, white, with numerous narrow rosy interrupted rays, and crowded minute oblique striæ; ventral margin convex; dorsal moderately convex on both sides, little sloping in front but greatly so behind; anterior side produced, its extremity rounded; posterior side short, its extremity very obtusely angulated; beaks rosy; ligament small, moderately prominent; flexure nearly obsolete.

Daleguete, Zebu.



164. *TELLINA DISPAR* (pl. lix. f. 108, 113, 114.) *Conrad*, Jour. Ac. N. S. Philad. vol. vii.

T. testâ ovatâ, solidiusculâ, satis convexâ, nitidâ, candidâ aut roseâ, subæquilaterali, posticè brevior et obtusè angulatâ aut obtusissimè cuneiformi, anticè rotundatâ; alterâ valvulâ lævi, alterâ striis tenuissimis anticè concentricis deinde obliquis confertim ornatâ; margine ventrali convexiusculo; dorsali utrinque haud multum declivi aut convexo; ligamento prominente; flexurâ obsoletâ.

Ovate, tolerably strong, moderately convex, glossy, white or rose-coloured, nearly equilateral, rounded in front, rather shorter and very obtusely wedge-shaped or obtusely angulated behind; one valve smooth, the other with fine striæ, which are concentric in front and then become oblique and crowded; ventral margin but slightly convex; dorsal edges not greatly sloping or convex; ligament prominent; flexure obsolete.

Sandwich Isles; and Isle of Bohol, soft mud, eight fathoms, (Cumming).

In some specimens there is a tinge of rose-colour near the dorsal edges.

165. *TELLINA LUTEA* (pl. lix. f. 103, and lxxv. f. 249.) *Gray* in Index Test. Sup. t. 1. f. 3; Hanl. Des. Cat. p. 67. sup. t. 1. f. 3. T. Guildfordiæ, *Gray* in Grif. Cuvier, Mol. t. 19. f. 2.

Young; T. alternidentata, *Brod.* and *Sow.*, Zool. Jour. vol. iv. p. 363; Zool. to Beechey Voy. t. 44. f. 5.

T. testâ ovali-subtrigonâ, subæquilaterali, subinæquivalvi, compressiusculâ, sublævigatâ, albidâ aut pallidè roseâ, epidermide subviridi fugaci (in junioribus) indutâ, anticè rotundatâ; margine ventrali subrecto aut convexiusculo; dorsali anticè subdeclivi et convexiusculo, posticè declivi et prope ligamentum magnum subretuso deindeque convexo; latere postico obtusissimè cuneiformi; natibus erosis; flexurâ obsoletâ; superficie internâ albido-roseâ, utrinque saturatius fucatâ, aut roseo subradiatâ; dentibus primariis in utrâque valvulâ duobus, altero simplici, altero bicuspidato, alternatim inter se insertis.

Oval-subtriangular, subequilateral, rather compressed, slightly inequivalve, nearly smooth, whitish or pale rose-colour under (in young specimens only) a thin fugacious greenish epidermis; ventral edge but slightly (if at all) convex; anterior side rounded, its dorsal edge but slightly convex and not much sloping; posterior extremity very obtusely wedge-shaped, the dorsal edge near the

great ligament retuse but afterwards convex ; beaks eroded ; flexure obsolete ; inside pink with a darker ray or stain on either side ; primary teeth two in each valve, a simple and a bicuspidate, which are alternately inserted.

Icy Cape.

165. *TELLINA COLUMBIENSIS* (pl. lxxv. f. 246.) *Hanley*, Zool. Proc 1844.

*T. testâ ellipticâ aut oblongo-ellipticâ, compressiusculâ, subtenui, lævigatâ, extus intusque albidâ, epidermide tenuissimâ fulvo-cinereâ indutâ ; margine ventrali medio convexiusculo, utrinque arcuato ; dorsali utrinque convexo, anticè paulo, posticè satis declivi ; latere antico longiore, rotundato ; extremitate posticâ acuminatâ ; flexurâ costâque umbonali subobsoletis ; ligamento prominulo ; dentibus minimis.*

Elliptic or elongated-elliptic, fragile, subinequivalve, rather compressed, whitish, covered by a very thin opalescent pale drab epidermis, quite smooth ; ventral edge arcuated, ascending posteriorly ; anterior side much the longer, its extremity rounded and somewhat attenuated, its dorsal edge convex and scarcely sloping ; posterior end acuminate, hinder dorsal edge at first hollowed out for the slightly prominent ligament, then very convex and considerably sloping ; flexure and umbonal ridge all but obsolete ; inside white, teeth minute.

Monte Christi, West Columbia.

Its more compressed valves and minute teeth will distinguish it from the few species which are allied to it in outline. The hinge-margin is very short and rather broad.

167. *TELLINA RUFESCENS* (pl. lxxiii. f. 213.) *Chemnitz*, vol. vi. f. 97. (malè) ; *Dillw. D. Cat.* p. 85 ; *T. operculata*, *Gmel.* 3235 ; *Wood, Gen. Conch.* p. 165. t. 42. f. 1 ; *Lam. no. 13* ; *Sow. Gen. Shells* ; *Hanl. Des. Cat.* p. 62. t. 4. f. 37 ; *Knorr. vol. vi. t. 12. f. 1.*

*T. testâ oblongâ, inæquivalvi, inæquilaterali, solidâ, subnitidâ, rubro-roseâ (intus saturatius fucatâ), sublævigatâ, lineis obsoletis radiantibus plerumque notatâ ; alterâ valvulâ convexâ, alterâ complanatâ ; margine ventrali medio subrecto, utrinque (præsertim posticè) sursum acclinato ; dorsali antico convexo, et vix declivi ; dorsali postico subdeclivi, prope ligamentum magnum prominensque retuso, deinde magis minusve convexo ; latere antico paululum brevior, rotundato ; postico attenuato obtusissimè acuminato ; costâ umbonali latâ, obtusâ ; flexurâ subobsoletâ.*

Oblong, inequivalve, rather strong, scarcely glossy, within and

without of a lighter or darker reddish rose-colour, nearly smooth, often with obsolete radiating lines, covered when fresh with a very thin epidermis; one valve convex, the other flat; ventral edge nearly straight or subretuse in the middle, rising at the extremities and particularly posteriorly; anterior side rather the shorter, its extremity rounded, its dorsal edge convex but scarcely sloping; posterior side very obtusely acuminate, the dorsal edge at first retuse and little sloping, then moderately sloping and convex; fold broad and obtuse; flexure nearly obsolete; ligament large.

Tumbez, Peru; soft sandy mud, five fathoms (Cuming).

168. *TELLINA NITIDA* (pl. lix. f. 101.) *Poli*, Test. Sic. vol. i. t. 15. f. 2, 3, 4; Lam. no. 28; Philip. En. Moll. Sic. vol. i. p. 27; Hanl. Des. Cat. p. 64. sup. t. 14. f. 4.

*T. testâ oblongâ, valdè compressâ, æquilaterali, satis solidâ, nitidâ, pallidè carneâ aut fulvâ; concentricè striatâ, striis tenuissimis, confertis, sed alterâ in valvulâ posticè magis remotis alterâque in valvulâ posticè obsoletis; margine ventrali medio subrecto; dorsali anticè convexo et subdeclivi, posticè declivi et subrecto; latere antico rotundato, postico cuneiformi; flexurâ nullâ.*

Oblong, much compressed, equilateral or nearly so, tolerably strong, very glossy, pale flesh-coloured or fulvous, within of a deeper hue, with fine regular and close concentric striæ, which at the posterior end of one valve are quite obsolete, and in the other are *there* replaced by stronger, more distant, and subimbricated ones; ventral edge nearly straight in the middle; anterior side rounded, its dorsal edge convex, and but moderately sloping; hinder side wedge-shaped, ligamental edge nearly straight; no flexure.

Mediterranean.

169. *TELLINA SOULEYETI* (pl. lix. f. 111.) *Hanley*, Zool. Proc. 1844.

*T. testâ oblongâ, tenuiusculâ, convexo-depressâ, extus intusque albidâ, lævigatâ; margine ventrali convexiusculo; dorsali anticè convexiusculo et subdeclivi, posticè recto aut subretuso et valdè declivi; flexurâ costâque umbonali distinctis; latere antico longiore, rotundato; extremitate posticâ subrostratâ; ligamento infosso; natibus acutis.*

Oblong, tolerably convex, nearly equilateral, but rather longer in front, of a rather dull white, not very thick, and quite smooth; the ventral edge more or less convex; the flexure as well as the umbonal ridge quite distinct; dorsal edge moderately convex and scarcely sloping in front, nearly straight or slightly retuse behind; anterior

extremity rounded, posterior somewhat beaked ; beaks acute ; ligament sunken ; inside white.

San. Nicolas, Zebu.

In the young, there is a slight appearance of rudimentary lateral teeth.

170. *TELLINA MICANS* (pl. lix. f. 106.) *Hanley*, Zool. Proc. 1844.

T. testâ ovato-oblongâ, tenui, compressiusculâ, subinæquilaterali, nitidissimâ, pellucidâ, nivêâ ; striis paucis remotis subobsoletis concentricis, etiamque in adultis, striis subobliquis remotis, anticè ornatâ ; margine ventrali anticè obliquè arcuato, posticè subrecto ; dorsali anticè vix declivi et convexiusculo, posticè declivi subretuso et angulum obtusum cum margine postico subincurvato formante ; latere postico brevior, cuneiformi ; extremitate anticâ obtusè rotundatâ ; flexurâ obsoletâ.

Ovate-oblong, thin, rather compressed, slightly inequilateral, extremely glossy, pellucid, snow-white, with a few indistinct and rather distant concentric striæ in front, which are crossed in adult specimens by very slightly oblique and distant ones ; ventral edge obliquely rounded anteriorly, and straightish behind ; anterior side slightly the longer, obtusely rounded, its dorsal edge scarcely sloping ; hinder extremity wedge-shaped, the ligamental edge subretuse near the moderately projecting ligament, and forming a very obtuse angle with the slightly incurved posterior edge ; flexure obsolete.

Catbalonga, Isle of Samar.

Bias, Isle of Negros.

171. *TELLINA MILES* (pl. lxii. f. 188.) *Hanley*, Zool. Proc. 1844.

T. testâ T. cuspidi affini sed oblongâ, rostratâ, compressiore ; margine antico dorsali vix paululum declivi ; ventrali convexo ; valvulâ alterâ lineis elevatis concentricis undique striatâ.

Like *T. cuspis* but oblong, beaked, and more compressed ; front dorsal edge scarcely at all sloping ; ventral edge convex ; one valve nearly smooth, the other with regular fine elevated concentric striæ.

Hab. ? (Mus. Metcalfe.)

172. *TELLINA CUSPIS* (pl. lix. f. 125.) *Hanley*, Zool. Proc. 1844.

T. testâ ovatâ, solidiusculâ, convexâ, nitidiusculâ, roseâ, anticè et infernè substriatâ ; margine ventrali arcuato ; dorsali utrinque subdeclivi, anticè convexo, posticè recto aut subretuso ; flexurâ costâque umbonali distinctis ; latere antico paululum longiore, rotundato ; postico subacuminato, subrostrato ; ligamento infosso.



Ovate, moderately strong, convex, rather glossy, deep rose-colour, substriated in front and towards the lower margin; ventral edge arcuated; dorsal but slightly sloping on either side, convex in front, straight or subretuse behind; fold and flexure perceptible; anterior side slightly the longer, rounded; posterior subacuminated, and somewhat beaked; ligament sunken.

Hab. ? (Mus. Cuming, Metcalfe.)

173. *TELLINA SCALPELLUM* (pl. lix. f. 116.) *Hanley*, Zool. Proc. 1844.

*T. testâ oblongâ, tenuissimâ, compressâ, nitidissimâ, valdè inæquilaterali, saturatius roseâ, pellucidâ, sublævigatâ; margine ventrali recto aut subrecto; dorsali antico paululum declivi, subrecto; latere postico brevi, obtusè subcuneiformi; extremitate lateris antici longioris, rotundatâ; ligamento parvo, prominulo; flexurâ obsoletâ.*

Oblong, very thin and pellucid, very inequilateral compressed, nearly smooth or concentrically substriated, of a very glossy deep rose-colour; ventral edge more or less straight; front side produced, rounded at its extremity, its dorsal edge nearly straight and very little sloping; hinder side obtusely wedge-shaped; ligament small and prominent; flexure almost entirely obsolete.

Isle of Zebu.

174. *TELLINA UNDULATA* (pl. lix. f. 107.) *Hanley*, Zool. Proc. 1844.

*T. testâ oblongâ, tenuissimâ, compressâ, impolitâ et valdè inæquilaterali, intus extusque albidâ, subobliquè et concentricè undulatâ; margine ventrali convexo; dorsali anticè subrecto et vix declivi, posticè incurvato satisque declivi; latere postico brevi, attenuato, rostrato, ad extremitatem biangulato; flexurâ costâque umbonali distinctis; natibus acutis; ligamento infosso.*

Oblong, very thin, compressed, very inequilateral, whitish both within and without, not glossy, with oblique undulations which become concentric near the short attenuated and beaked posterior extremity, of which the tip is acute and biangulated; ventral edge convex; dorsal anteriorly straightish and scarcely sloping, posteriorly incurved and moderately sloping; anterior side produced, its extremity obtusely rounded; fold and flexure perceptible; ligament sunken; beaks acute.

St. Elena, West Columbia.

175. *TELLINA CYGNUS* (pl. lix. f. 122.) *Hanley*, Zool. Proc. 1844.

T. testâ ovatâ aut ovato-oblongâ, solidiusculâ, subæquilaterali, convexâ, nitidâ, candidâ, concentricè substriatâ; margine ventrali convexiusculo; dorsali anticè subrecto et paululum declivi, posticè recto et valdè declivi; extremitate anticâ rotundato-obtusâ; latere postico cuneiformi, subrostrato; flexurâ ventrali distinctâ; ligamento infosso; superficie internâ candidâ, submargaritaceâ.

Ovate or ovate-oblong, tolerably firm, nearly equilateral, convex, glossy, white, concentrically substriated; ventral margin slightly convex; dorsal nearly straight and very slightly sloping in front; quite straight and much sloping behind; anterior end obtusely rounded; posterior side wedge-shaped, and subrostrated; flexure distinct; ligament sunken; outside white and somewhat pearly.

Bias, Isle of Negros, Philippines.

176. *TELLINA ALA* (pl. lx. f. 137, 146.) *Hanley*, Zool. Proc. 1844.

T. testâ ovatâ, solidiusculâ, subinæquivalvi, subæquilaterali, nitidâ, convexiusculâ, extus intusque albidâ, radio brevi pallidè aurantio in adultis utrinque ornatâ, concentricè substriatâ; margine ventrali magis minusque convexo; dorsali anticè convexo et subdeclivi, posticè declivi et prope nates subretuso; latere antico rotundato, longiore; postico angulato, subrostrato; flexurâ costâque umbonali conspicuis; ligamento infosso; cardine dentibus primariis parvis, et nonnunquam dente laterali antico rudimentali, instructo.

Var. ovato-trigonâ, solidâ, lævi aut sublævigatâ, convexâ, nequam rostratâ; flexurâ costâque umbonali subinconspicuis.

Ovate, tolerably solid, very slightly inequivalve, nearly equilateral, rather convex, of a silky gloss, concentrically substriated, whitish within and without, with (in adult specimens) a short pale orange streak radiating on either side from the beaks; ventral edge more or less convex; anterior side rather the longer, rounded at its extremity, its dorsal edge convex, and not greatly sloping; posterior side angulated and subrostrated, its dorsal edge retuse near the beaks, and decidedly sloping; fold and flexure conspicuous; ligament rather sunken; primary teeth small, sometimes a rudimentary anterior lateral one.

Var. Ovate-triangular, solid, convex, nearly or quite smooth, not at all beaked, the orange rays clearly visible; fold and flexure by no means conspicuous.

Ceylon.

177. *TELLINA NYMPHALIS* (pl. lxii. f. 196.) *Lam.* no. 50; *Haut.* Des. Cat. p. 70.

T. testâ ovatâ aut obovatâ, magis minusve ventricosâ, solidiusculâ, subnitidâ, sublævigatâ, subæquilaterali, extus intusque albidâ, lineis obsoletis pallidioribus subradiatâ, epidermide pertenui lutescente indutâ; margine ventrali anticè arcuato, posticè sursum acclinato; dorsali anticè prope nates acutas subrecto deindeque arcuato et subdeclivi, posticè subretuso et valdè declivi; latere antico longiore, rotundato; postico attenuato, angulato, et paululum subrostrato; flexurâ costâque umbonali satis conspicuis; ligamento prominulo; dentibus minimis.

Ovate or obovate, more or less ventricose, not very strong, rather glossy, nearly equilateral, whitish both within and without, covered by a very thin yellowish ash-coloured epidermis, nearly smooth being merely wrinkled by the lines of growth, peculiarly marked with obsolete radiating lines; ventral edge arcuated in front and rising behind; anterior side rather the longer, its extremity rounded, its dorsal edge at first nearly straight and then arched and moderately sloping; posterior side attenuated, angulated, and very slightly beaked; fold and flexure tolerably distinct; ligament short and slightly prominent; teeth very small.

Gambia.

In typical examples there is a slight groove-like depression behind the fold, which does not exist in the next species.

178 *TELLINA CAYENNENSIS* (pl. lxii. f. 190.) *Psammobia* C. *Lam.* no. 11; *Hanl. Des. Cat.* p. 58. sup. t. 11. f. 48; *Deles. Rec.* t. 5. f. 7; *T. constricta*, *Phil.*, Ab. und Bes. *Conch.* part 3. t. 5. f. 5; *T. intastriata*, *Say*, *Jour. Ac. Nat. Sc. Philad.*

T. testâ ovali-trigonâ, solidâ aut solidiusculâ, magis minusve ventricosâ, subinæquivalvi, subinæquilaterali, nitidiusculâ, extus intusque albidâ, epidermide cinerascens indutâ, sublævigatâ; margine ventrali convexiusculo; dorsali anticè convexo et subdeclivi, posticè subrecto et declivi; latere antico paulo longiore, rotundato; postico cuneiformi; natibus rectè incurvatis; ligamento prominulo, satis magno; flexurâ costâque umbonali satis conspicuis; dentibus haud parvis.

Triangularly-oval, more or less solid and ventricose, slightly inequivalve and inequilateral, scarcely glossy, nearly smooth, whitish within and without, covered by a very thin ashy epidermis; ventral edge slightly convex; dorsal convex and moderately sloping in front, straightish (never incurved) and strongly sloping behind; front side rounded, rather the longer; hinder side wedge-shaped; beaks incurved; ligament little prominent, and as well as the teeth, of a moderate size; fold and flexure tolerably distinct.

Closely resembling the last, of which it is possibly a variety, but is more triangular, and not so distinctly marked with radiating lines. Guiana, Mexico, Florida.

179. *TELLINA ALBA* (pl. lxii. f. 193.) *Quoy* and *Gaim.*, *Voy. Astrol. Zool.* vol. iii. p. 500. t. 81. f. 1, 2, 3.

T. testâ subovatâ, solidiusculâ, subcompressâ, subpellucidâ, nitidiusculâ, extus intusque albâ, sublævigatâ; margine ventrali convexo et posticè sursum acclinato; dorsali anticè arcuato et vix subdeclivi, posticè elongato declivi et subrecto; latere antico lato, multum brevior, rotundato; postico attenuato, obtusè cuneiformi; ligamento infosso; costâ umbonali et flexurâ ventrali inconspicuis; natibus subacutis; dentibus bifidis, subvalidis, simplicibus subobsoletis.

Subovate, tolerably strong, rather flat, semi-transparent, nearly smooth, somewhat glossy, white, one of the valves with obsolete concentric striæ; the ventral edge convex and ascending posteriorly; anterior side broad, and distinctly the shorter, rounded at its extremity, arcuated and but little sloping at its dorsal margin; the posterior side obtusely cuneiform, its tip attenuated and obtusely angulated, its dorsal edge elongated scarcely convex and obliquely sloping; beaks rather prominent; ligament sunken; umbonal ridge *not* conspicuous; the bifid teeth rather strong, the simple nearly rudimentary.

In all the specimens I have seen, there are two or three obsolete radiating folds at the anterior extremity.

Australia.

180. *TELLINA PROXIMA* (pl. lxvi. f. 264. and lix. f. 115.) *Brown* in *Zoology* to *Beechey*, p. 154. t. 44. f. 4; *Phil. Ab. und Bes. Conch.* part 9. pl. 5. f. 4; T. sordida, *Couthouy*, *Boston Journ. Nat. Hist.* vol. ii. p. 59. t. 3. f. 11; *Sanguinolaria sordida*, *Gould*, *Invert. Massachusetts*, p. 67; *Macroma tenera*, *Leach*, *Appendix Ross. Voyage*.

T. testâ obovali, tenuiusculâ, valdè inæquilaterali, convexâ aut convexiusculâ, impositâ, extus albidâ, intus candidâ, epidermide cinerascens fugaci indutâ, concentricè obsoletè et subimbricatim striolatâ; margine ventrali magis minusve convexo; dorsali anticè arcuato et paulo declivi, posticè recto et valdè declivi; latere postico brevi, et infernè subangulato; extremitate posticâ rotundatâ; natibus plerumque erosis; ligamento magno, prominente; costâ umbonali subobsoletâ; dentium altero in utrâque valvulâ bifurcato.

Oboval, thinnish, fragile, very inequilateral, more or less con-



vex, dull whitish (internally pure white), covered by a thin ash-coloured fugacious epidermis; ventral margin more or less convex; front dorsal edge arched and slightly sloping, hinder one straight and greatly sloping; posterior side short, subangulated below; anterior extremity rounded; beaks usually eroded; ligament large and prominent; fold almost obsolete; one of the teeth bifurcate (when the hinge is perfect, which is rarely the case) in each valve.

Boston, (Gould); Arctic Ocean.

181. *TELLINA CALCAREA* (pl. lxii. f. 183.) *Chemnitz*, vol. vi. p. 140. f. 136; Dillwyn D. Cat. p. 93; Hanl. Des. Cat. p. 46. t. 4. f. 43; *T. sordida*, *Phil. Ab. und Bes. Conch.* part 9. t. 5. f. 6.

T. testâ ovatâ aut subovatâ, solidiusculâ, subinæquivalvi, convexiusculâ, inæquilaterali, extus intusque albidâ, epidermide cinerascente indutâ, sublævigatâ; margine ventrali satis convexo, posticè acclinato; dorsali anticè convexo et subdeclivi, posticè declivi et subrecto; latere antico longiore, ad extremitatem rotundato; postico obtusè cuneiformi; natibus acutis, prominentibus; costâ umbonali satis distinctâ; flexurâ ventrali subinconspicuâ; ligamento magno, prominulo; dentibus parvis.

More or less ovate, moderately firm, very slightly inequivalve, tolerably convex, inequilateral, whitish both within and without, never polished but often slightly glossed, covered with an ashy epidermis, under which it is nearly smooth or merely marked with the lines of growth; ventral edge ascending behind, moderately convex; anterior side the shorter, rounded at its extremity, its dorsal edge convex and somewhat sloping, but near the acute and prominent beaks slightly incurved; hinder side obtusely wedge-shaped, the ligamental edge nearly straight; umbonal ridge tolerably evident; the ventral sinus almost obsolete; ligament large and moderately projecting.

Iceland and Greenland.

182. *TELLINA NASUTA* (pl. lxiv. f. 224.) *Conrad*, Jour. Ac. Nat. Sc. Philad. vol. vii. p. 258; Hanl. Des. Cat. p. 71. sup. t. 14. f. 7.

T. testâ ovato-oblongâ, solidâ, inæquilaterali, convexâ, impolitâ, sublævigatâ, albidâ, epidermide cinerascante plerumque indutâ; margine ventrali medio subretuso; dorsali anticè convexo paululumque declivi, posticè elongato recto et declivi; latere antico brevior, rotundato; postico cuneiformi; extremitate posticâ subbiangulatâ; natibus obtusis; lunulâ nullâ; flexurâ costâque um-

bonali conspicuis; ligamento magno et satis prominente; superficie internâ candidâ; dentibus satis magnis.

Ovate-oblong, solid, inequilateral, convex, dull, whitish, usually covered by an ashy epidermis, nearly smooth, flexuous; ventral margin convex at the sides, but retuse in the middle; anterior side rounded, its dorsal edge convex and but little sloping; posterior side wedge-shaped, its extremity nearly biangulated, its dorsal margin elongated sloping and nearly straight; fold and flexure conspicuous; ligament tolerably large and prominent; beaks obtuse; no lunule; inside white, the teeth of a moderate size.

California.

183. *TELLINA EDENTULA* (pl. lxx. f. 243.) *Brod. and Sow.*, Zool. Jour. vol. iv. p. 363; Zool. to Beech. Voy. t. 41. f. 5. and t. 44. f. 6; *Hanl. Des. Cat.* p. 71.

T. testâ obovali-subtrigonâ, solidiusculâ, subventricosâ, subimpolitâ, subinæquilaterali, sordidè albidâ, sublævigatâ; margine ventrali convexiusculo; dorsali utrinque subdeclivi, anticè convexo, posticè subrecto; latere antico paulo longiore, rotundato; postico obtusè subangulato; flexurâ costâque umbonali subobsoletis; ligamento magno, prominente; dentibus minimis, sublamellosis.

Var. Abbreviatâ et magis inæquilaterali.

Oboval, subtriangular, tolerably strong, more or less ventricose, of a rather dull dirty white, nearly smooth, more or less inequilateral; ventral edge moderately convex; dorsal not greatly sloping on either side, convex in front, straightish and rather short behind; anterior side the longer, rounded at its extremity; posterior side obtusely subangulated; fold and flexure rather obsolete; ligament large and prominent; inside white; teeth very small, and usually sublamellar.

Var. Shorter and more inequilateral.

Behring's Straits.

184. *TELLINA INORNATA* (pl. lix. f. 123.) *Hanley*, Zool. Proc. 1844.

T. testâ ovato-oblongâ, subtenui, subventricosâ, impolitâ, subæquilaterali, sordidè albidâ, epidermide tenui et cinereâ indutâ, lævigatâ; marginis ventralis parte mediâ rectâ aut subretusâ; dorsalis parte anticâ convexiusculâ et paululum declivi, parte posticâ subdeclivi; extremitate anticâ rotundatâ, posticâ attenuato-rotundatâ; flexurâ costâque umbonali obsoletis.

Ovate-oblong, rather thin, subventricose, and nearly equilateral,

smooth, dull dirty white under a thin ash-coloured epidermis; ventral edge straight or subretuse in the middle; dorsal slightly convex and very little sloping in front, moderately sloping behind; front extremity rounded, the hinder rounded but attenuated; fold and flexure obsolete.

Conception, Chili.

A fossil-like shell, which much resembles an elongated and swollen Edentula.

185. *TELLINA BALTHICA* (pl. lix. f. 121.) *Lin. Sys.* 1120; *Chem.* vol. 6. f. 128. *Hanl. Des. Cat.* p. 72. t. 4. f. 85.

*T. testâ suborbiculari, subtrigonâ, solidâ, æquilaterali, subventricosâ, albidâ aut pallidè carneâ, intus plerumque roseâ, lævigatâ; margine ventrali arcuato et posticè sursum acclinato; dorsali antico brevi, subdeclivi, et prope nates prominentes subrecto, deindeque convexo; margine ligamentali subrecto aut convexiusculo, et valdè declivi; latere antico rotundato; extremitate lateris postici angulati rotundatâ; ligamento magno, prominente; flexurâ costâque umbonali obsoletis; dentibus parvis.*

Suborbicular, slightly triangular, thick, equilateral, more or less ventricose, white or pale flesh coloured, with the interior usually rosy, smooth, not glossy; ventral edge arcuated, rising behind; front dorsal edge, short and not much sloping, nearly straight adjacent to the prominent beaks, becoming convex subsequently; hinder dorsal edge nearly straight or but slightly convex, much sloping; anterior side rounded; posterior side angulated, but with the tip rounded; ligament large, and prominent; fold and flexure obsolete; teeth small.

Baltic.

Easily distinguished from the allied species, by its more rounded shape, its ventricoseness, and arcuation of its lower edge. *T. Fabricii* which approaches it in these respects, is less angulated behind.

186. *TELLINA FUSCA* (pl. lix. f. 117.) *Psammobia fusca*, *Say, Jour. Ac. Nat. Sc. Philad.* 5. p. 220. *Sanguinolaria fusca* *Conrad. Am. Mar. Conc.* p. 34. t. 7. f. 1; *Gould, Inv. Massa.* p. 66. f. 42.

*T. testâ obovatâ, solidiusculâ aut subtenui, subæquilaterali, compressâ aut convexiusculâ, subimpolitâ, albidâ, epidermide tenuissimâ cinerascete indutâ, lævigatâ; margine ventrali maximè et regulariter arcuato; dorsali utrinque subdeclivi, anticè arcuato, posticè subrecto; latere antico rotundato; postico subangulato;*

natibus parvis acutis, prominentibus; flexurâ costâque umbonali obsoletis, ligamento prominulo; dentibus angustissimis.

Obovate, rather thin, nearly if not quite equilateral, more or less compressed or but slightly convex, scarcely at all glossy, whitish under a thin ashy epidermis, smooth; ventral edge regularly and greatly arcuated; the dorsal edges not much sloping, arched in front, and nearly straight behind; anterior side rounded, posterior subangulated; beaks small, acute, and prominent; ligament rather projecting; fold and flexure obsolete; teeth very narrow.

"Its varieties in size, strength, and colour, are very great. In muddy bays, they grow to a larger size, and are thick and of a blueish and, sometimes, a rusty colour, and covered with a firm dark epidermis. In clean sandy localities they are very thin, pure white, or sometimes of a delicate rose or lemon colour, and the epidermis very slight."—*Gould*.

North America.

187. *TELLINA INCONSPICUA*\* (pl. lix. f. 120.) *Broderip and Sow.*, Zool. Jour. vol. 4. p. 363; Zool. to Beech. Voy. t. 41. f. 6. Hanl. Des. Cat. p. 72.

T. testâ Solidulæ affini, sed impolitâ et epidermide fusco-cine-

\* A species which bears some resemblance to a young *Inconspicua*, or *Fusca*, but which nevertheless is probably distinct, at least judging from the figure, for I have never been able to procure a specimen of the shell, is the

*TELLINA PETALUM* (pl. lxvi. f. 263.) *VALENCIENNES* in Zool. to Humb. and Bonpl. Voy. vol. ii. p. 222. t. 48. f. 2.

T. testâ subovatâ, tenuiusculâ, fragili, subæquilateralî, compressiusculâ, sublævigatâ, supernè subroseâ, infernè albido-luteâ, zonis subroseis plerumque ornatâ; margine ventrali satis convexo; dorsali anticè convexo et subdeclivi, posticè convexiusculo et declivi; latere antico rotundato; postico subangulato; ligamento parvo, brevi; dentibus lateralibus nullis.

Subovate, thinnish, fragile, nearly inequilateral, rather compressed, nearly smooth, merely marked with the striæ of growth, somewhat rosy near the beaks, becoming pale yellowish with rosaceous zones towards the ventral edge, which is but moderately convex; front dorsal edge convex and not much sloping, hinder one but slightly convex and decidedly sloping; anterior extremity rounded; posterior side subangulated; ligament short and small; teeth small, no lateral ones.

Acupulco.



rascente indutâ ; latere antico brevior ; postico haud acuminato ; ligamento permagno ; natibus et umbonibus plerumque erosis.

Very like *Solidula*, but the front side is the shorter one, and the posterior extremity is not at all acuminated. The surface is not glossy, is usually eroded near the beaks, and covered with an ashy-brown epidermis near the ventral margin, which is regularly sub-arcuated. The ligament is very large and prominent.

Arctic Ocean.

188. *TELLINA FABRICII* (pl. lix. f. 112.) *Hanley* ; *Venus fragilis*, *Otho Fabr.*, Faun. Groen. p. 413.

T. testâ suborbiculari, solidâ, æquilaterali, convexâ aut subventricosâ, impolitâ, extus intusque albidâ, epidermide cinerascens indutâ, concentricè subrugulosâ ; margine ventrali magis minusve arcuato ; dorsali utrinque convexiusculo, antici subdeclivi, posticè declivi ; latere antico rotundato ; postico vix etiam obtusissimè subangulato ; natibus erosis ; ligamento permagno, prominente ; flexurâ obsoletâ ; dentibus minimis.

Suborbicular, solid, equilateral, convex or subventricose, dull white, covered by an ashy epidermis, concentrically wrinkled by the lines of growth ; ventral margin more or less arcuated ; dorsal edges moderately convex, rather sloping in front, decidedly so behind ; anterior side rounded, posterior scarcely at all angulated ; beaks eroded ; ligament large, and prominent ; flexure obsolete ; teeth very small.

There being already a *T. fragilis*, I am compelled to alter the original specific appellation of the shell.

Northern Seas.

189. *TELLINA SOLIDULA* (pl. lix. f. 109, 110.) *Pultney*, Cat. Dorset. p. 29 ; *Mont. Test. Brit.* p. 63 ; *Maton, Lin. Tr.* 8 ; *Wood, Gen. Con.* 193. t. 46. f. 2 ; *Lam. no.* 51 ; *Hanl. Des. Cat.* p. 70. t. 4. f. 84 ; *T. zonata, Dillw. D. Cat.* p. 100 ; *Psammobia solidula, Turton, Biv. Brit.* p. 95. t. 8. f. 2 ; *T. Balthica, Phil. En. Moll. Sic.* vol. i. p. 28 ; *T. rubra, Du Cost. Brit. Conch.* t. 12. f. 14.

T. testâ rotundato-ovatâ, solidâ, subæquilaterali, convexâ aut subventricosâ, magis minusve nitidâ, lævigatâ, albidâ, luteâ, aurantiâ aut roseâ ; margine ventrali anticè arcuato, posticè sursum acclinato ; dorsali anticè arcuato et subdeclivi, posticè declivi et vix convexiusculo ; latere antico paululum longiore, rotundato ; postico acuminato ; natibus acutis, prominentibus ; costâ umbonali obsoletâ ; ligamento magno prominente ; dentibus angustissimis et sæpe obsoletis.

Rounded-ovate, solid, subequilateral, convex or subventricose, more or less glossy, smooth or with a few ridges of growth, very variable in colouring, being white yellow orange or rosy; ventral edge arcuated in front, and rising behind so as to form a sharp angle with the slightly convex and moderately sloping ligamental margin; anterior side very slightly the longer and rounded; its dorsal edge arched and moderately sloping; ligament prominent; fold obsolete; beaks rather prominent and acute; teeth extremely narrow, and usually obsolete.

Britain; Europe; Senegal.

190. *TELLINA IRUS* (pl. lx. f. 145.) *Hanley*, Zool Proc. 1844.

*T. testâ ovatâ aut obovatâ, crassâ (in adultis), subventricosâ, subæquilaterali, impolitâ, extus intusque sordidè albidâ; concentricè rugosâ, rugis interruptis, minutis, confertissimis, elevatis; margine ventrali magis minusve arcuato; dorsali anticè convexo et subdeclivi, posticè convexiusculo elongato declivi; latere antico paululum brevior, rotundato; postico infernè angulato; lunulâ (in adultis) parvâ, profundâ; ligamento infosso; costâ umbonali subobsoletâ; dentibus satis magnis.*

Ovate or obovate, solid, coarse, subventricose, subequilateral, dull dirty white both within and without, the surface roughened by minute concentrically arranged but unconnected elevated wrinkles (remining one of those upon *Rugosa* but on a much smaller scale), which however are usually (except in portions) abraded; front dorsal edge convex after passing the small but distinct lunule; ligamental edge not greatly convex, and decidedly sloping so as to form an angle with the more or less arched ventral margin; beaks inclining to the rounded extremity of the shorter anterior side; ligament sunken but distinct; a large bifid and a simple scarcely rudimentary tooth in one valve, two rather strong diverging obtuse ones in the other.

Guinea? Mus. Cuming and Walton.

191. *TELLINA FRAGILIS* (pl. lvi. f. 14. and lx. f. 149.) *Lin.* Syst. 1117; *Chem.* vol. vi. f. 84; *Philip. Mol. Sic.* p. 28; *Poli. Test. Sic.* t. 15. f. 22, 24; *Petricola ochroleuca, Lam.*, no. 2; *Payr. Cat. Cors.* t. 1. f. 9, 10; *Hanl. Des. Cat.* p. 52. sup. t. 1. f. 6; *Psammobia fragilis, Turt. Biv. Brit.* p. 88. t. 7. f. 11, 12.

*T. testâ ovato-trigonâ, solidiusculâ, subpellucidâ, valdè inæquilaterali, satis tumidâ, subimpolitâ, albidâ aut pallidè croceâ, ad umbones flavesciente aut croceâ, striis remotiusculis elevatis concentricè asperâ; margine ventrali convexo, posticè sursum acclinato;*

dorsali utrinque satis declivi, anticè convexo, posticè prope nates subretuso deindeque convexiusculo; latere antico rotundato, breviorè; postico obtusè acuminato et paululum subrostrato; natibus obtusis; flexurâ costâque umbonali obsoletis; superficie internâ plerumque crocâ; dentibus satis magnis.

Var. Magis elongatâ, tumidâ; striis lamellosis; margine ventrali minus convexo; extremitate posticâ obtusè biangulatâ.

Ovate-trigonal, moderately solid, slightly pellucid, very inequilateral, rather tumid; almost devoid of glossiness, whitish with a tinge of yellow or saffron colour (which sometimes but rarely pervades the entire surface) upon the umbones; rough with concentric elevated rather distant striæ; ventral edge convex; dorsal slightly retuse on either side of the obtuse beaks, and then convex and rather sloping in front, scarcely convex but decidedly sloping behind; anterior side short and rounded; posterior obtusely acuminate and very slightly subrostrated; fold and flexure obsolete; inside usually of a saffron colour; teeth rather large, two diverging ones in one valve, a recurved one in the other.

Var. Elongated and not at all triangular, tumid; the striæ lamellar; ventral edge scarcely at all convex; hinder end obtusely biangulated.

Scarcely a *Tellina*, but with the teeth and general characters of so many usually included in that genus, that I know not how to separate it. From the figure in Delessert, the *Psammotæa Tarentina* of Lamarck is probably a variety of this shell.

Britain, Europe.

192. *TELLINA GUINAICA* (pl. lix. f. 130.) *Chemnitz*, vol. xi. p. 348. f. 1651, 1652, 1653; *Dillw. Des. Cat.* p. 69; *T. polygona*, *Gmel.*; *Lam.* no. 43.

T. testâ ovatâ, solidâ, ventricosâ, impolitâ, inæquilaterali, extus intusque albidâ, lineis rudioribus subremotis elevatis concentricè striatâ; margine ventrali magis minusve convexo; dorsali posticè subdeclivi et subrecto, anticè magis declivi et subincurvato; latere antico brevi, rotundato; latere postico rotundato-angulato aut obtusissimè cuneiformi, extremitate ejus semper rotundatâ; costâ umbonali subinconspicuâ; lunulâ distinctâ; ligamento infosso; dentibus magnis.

Ovate, solid, ventricose, dull, inequilateral, within and without whitish, roughened by coarse raised concentric and rather distant striæ; ventral edge more or less convex; dorsal edge straightish and not much sloping behind, more sloping and somewhat incurved in front; anterior side short and rounded; posterior somewhat

angulated below, or very obtusely wedge-shaped, the tip always rounded; fold not very distinct; ligament sunken; a distinct short lunule; teeth very large.

Guinea.

This is probably the *Abildgaardiana* of Spengler.

193. *TELLINA POLYGONA* (pl. lxii. f. 189.) *Chemnitz*, vol. vi. p. 91. f. 77; *Dillw. Des. Cat.* p. 77; *Hanl. Des. Cat.* p. 69. t. 3. f. 11; *T. multangula*, *Gmel.*, 3230; *Lam.* no. 42.

*T. testâ* ovato-oblongâ, solidâ, ventricosâ, inæquilaterali, impolitâ, extus intusque albidâ, lineis elevatis confertis concentricè striatâ, anticè breviorè, posticè subcuneiformi; margine ventrali subrecto; dorsali anticè paululum declivi, posticè longo subrecto declivi; extremitate anticâ obtusâ; posticâ attenuatâ et biangulatâ; flexurâ costâque umbonali perspicuis; ligamento subinfosso; dentibus magnis.

Ovate-oblong, solid, ventricose, inequilateral, not glossy, whitish within and without, roughened by coarse crowded concentric raised striæ, shorter in front, somewhat wedge-shaped behind; ventral edge straightish, but rendered wavy by two extremely obsolete and subcentral radiating ridges; anterior extremity obtuse, dorsal edge short and scarcely at all sloping; posterior tip narrow and biangulated, the ligamental margin long straightish and sloping; fold and flexure evident; teeth large.

Guinea.

194. *TELLINA BRUGUIERI* (pl. lxii. f. 192.) *Hanley, Zool. Proc.* 1844; *Enc. Mèth.* t. 231. f. 2.

*T. testâ* rotundato-trigonâ, solidâ, subæquilaterali, convexâ, impolitâ, extus intusque albidâ, sublævigatâ, (aut striis exilibus obsolete radiantibus strias concentricas tenuissimas decussantibus); margine ventrali convexo aut subarcuato; dorsali posticè elevatiore valdè declivi et paululum convexo, anticè arcuato et declivi; extremitate anticâ obtusâ; posticâ rotundatâ; natibus prominentibus, et anticè incumbentibus; flexurâ costâque umbonali obsolete; ligamento infosso; lunulâ parvâ; dentibus maximis.

Suborbicular, subtriangular, solid, nearly equilateral, convex, white within and without, dull, nearly smooth, when closely examined some of the adult specimens present the appearance of a most minute decussation, caused by the intersection of delicate obsolete radiating lines and very fine concentric striæ, which latter are chiefly apparent near the convex or subarcuated ventral margin; posterior dorsal edge abruptly sloping, slightly convex, and



more elevated than the arcuated and moderately sloping anterior; front extremity broad and rounded, hinder one obtuse; ligament sunken; fold and flexure obsolete; beaks prominent and inclining forward; teeth extremely large.

Isle of Panay, Philippines (Cuming).

195. *TELLINA ALTA* (pl. lxii. f. 200.) *Conrad*, Jour. Ac. N. S. Philad. vol. vii. p. 258; Hanl. Des. Cat. p. 71.

T. testâ obovali, subventricosâ, crassiusculâ, subinæquilaterali, impolitâ, concentricè et confertim rugosâ, extus intusque albidâ; margine ventrali subrecto; dorsali utrinque paululum declivi, anticè convexo, posticè recto; latere antico longiore, rotundato; extremitate posticâ obtusè biangulatâ; costâ umbonali latâ, planulatâ; natibus rectè incurvatis; ligamento infosso; dentibus angustis.

Oboval, slightly ventricose, thickish, slightly inequilateral, dull white, with crowded concentric wrinkles; ventral edge straightish; dorsal little sloping on either side, convex in front, rectilinear behind; anterior side rather the longer, rounded at its extremity; posterior side obtusely biangulated; umbonal ridge broad but flattened; beaks directly incurved; ligament sunken; inside white; the teeth narrow; the hinge margin broad.

California.

196. *TELLINA EPHIPIUM* (pl. lxv. f. 244.) *Spengler*, loc. cit.

T. testâ *Lacunosæ* simillimâ, sed valdè inæquivalvi et planè inæquilaterali; costâ umbonali angustissimâ, carinatâ.

Closely resembling *Lacunosa*, but decidedly inequivalve and inequilateral; the umbonal ridge narrow and carinated in the flatter valve, replaced by a linear indentation in the other.

East Indies (Spengler).

197. *TELLINA LACUNOSA* (pl. lxv. f. 252.) *Chem.*, vol. iv. p. 92. f. 78; Lam. no. 39; Enc. Mèth. t. 290. f. 14; Hanl. Des. Cat. p. 69. t. 3. f. 12; T. papyracea, *Gmel.*

T. testâ obovali, ventricosâ, subinæquivalvi, subæquilaterali, tenuiusculâ, subpellucidâ, extus intusque candidâ, sublævigatâ, medio contorto-lacunosâ; margine ventrali subrecto sed contorto; dorsali antico subarcuato; ligamentali subdeclivi, subrecto; latere antico lato, rotundato; postico lato, obtuso; natibus prominentibus, incurvatis; ligamento subinfosso; costâ umbonali latâ, obtusâ.

Var. Testâ crassiore ; parte superiore lateris postici partem inferiorem superante.

Oboval, rather thin, very slightly inequivalve, nearly inequilateral, ventricose, somewhat pellucid, white, nearly smooth or with delicate concentric wrinkles, which are chiefly apparent near the rounded anterior extremity ; ventral edge nearly straight (as to convexity), but much twisted, owing to the concavity in front of the obtuse but prominent umbonal slope in one of the valves ; dorsal edge scarcely sloping, arcuated in front, straightish behind ; extremity of the hinder side (which is slightly the shorter) very obtusely biangulated ; ligament rather sunken ; beaks broad and directly incurved ; teeth small.

Var. Thicker and coarser ; a broader space from the umbonal ridge to the posterior end, which latter projects at its upper extremity.

Guinea.

198. *TELLINA SPECTABILIS* (pl. lkv. f. 254.) *Hanley*, Zool. Proc. 1844.

T. testâ ovato-trapeziformi, subtenui, maximè inæquilaterali, ventricosâ, impolitâ, extus intusque albidâ ; concentricè striatâ, striis elevatis, tenuibus, rugosis ; margine ventrali paululum convexo ; dorsali anticè convexo et declivi, posticè recto aut subincurvato et maximè declivi ; extremitate lateris antici longioris obtusâ ; extremitate posticâ truncato-cuneiformi, obtusè biangulatâ ; flexurâ costâque umbonali conspicuis ; ligamento magno, haud prominente ; dentibus minimis.

Ovate, subtrapeziform, not solid, extremely inequilateral, ventricose, dull, white both internally and externally, with fine raised concentric wrinkles, which are rather distant near the beaks, but become closer towards the but little convex ventral margin ; anterior side produced, its dorsal edge convex and sloping (in the young it is at first almost parallel with the ventral) ; its extremity obtuse or more rarely rounded ; posterior side extremely short, its extremity truncato-cuneiform and obtusely biangulated, the ligamental edge abruptly sloping and straight or slightly incurved ; fold and flexure prominent, the former subcarinated in the young ; ligament large but not projecting ; teeth minute.

Bay of Manilla and Isle of Siquijor.

199. *TELLINA DOMBEI* (pl. lxii. f. 182, and pl. lxiv. f. 222.) *Hanley*, Zool. Proc. 1844.

T. testâ obovatâ aut ovali, subinæquivalvi, magis minusve so-

lidâ, subventricosâ, subimpolitâ, sublævigatâ, extus intusque albidâ, umbonibus aurantio-roseis; margine ventrali subrecto aut paululum convexo; dorsali antico vix declivi et prope nates prominulas subretuso, deinde magis minusve convexo; margine ligamentali declivi, subrecto; extremitate anticâ rotundatâ; latere postico brevior, obtusè cuneiformi; flexurâ subobsoletâ, (rarius distinctâ); ligamento infosso.

Var. Testâ majore, impolitâ, opacâ, concentricè subrugosâ, umbonibus haud erubescens; flexurâ costâque umbonali distinctis.

Varying in form from obovate to oval, more or less solid, rather ventricose, rarely at all glossy, whitish with the umbones reddish crimson, nearly smooth, (in full grown individuals with a few concentric striae near the scarcely convex ventral margin, whose flexure is rarely distinct); anterior side the longer, sometimes greatly, at others scarcely so, its dorsal edge for about half its length from the rather prominent beaks somewhat refuse and nearly parallel to the lower edge, thence declining in a convex slope to the rounded termination; hinder extremity more or less obtusely wedge-shaped, the ligamental edge sloping strongly, and being more or less straight; ligament sunken; the inner disk red; one umbone projecting beyond the other.

Var. Larger, dull, opaque, the umbones not coloured, the surface somewhat wrinkled concentrically; fold and flexure distinct.

Panama, the variety from Tumbez.

200. *TELLINA ANGULATA* (pl. lxxv. f. 250.) *Chemnitz*, vol. vi. p. 89. f. 74, 75; *Wood*, Gen. Conch. p. 146. t. 43. f. 1; *Schroet. Einl.* vol. ii. t. 7. f. 8; *Lutraria Tellinoides*, *Lam.*; *Deles.* t. 3. f. 5; *Hanl. Des. Cat.* p. 27. sup. t. 11. f. 33.

T. testâ subovali, inaequali, solidiusculâ, inaequilaterali, convexâ aut subventricosâ, extus intusque albâ, sublævigatâ; margine ventrali subrecto aut convexiusculo; dorsali utrinque paululum declivi aut subdeclivi et subrecto, posticè elevatiore, anticè prope nates subincurvato; latere antico obtuso aut rotundato, longiore; extremitate posticâ obtusâ, subattenuatâ, aut obtusissimè biangulatâ; natibus prominentibus incurvatis, acutis; costâ umbonali satis distinctâ; ligamento parvo, angusto, infosso; dentibus obsoletis.

Somewhat oval, inequivalve, tolerably strong, moderately inequilateral, convex or subventricose, white both within and without, nearly smooth; ventral edge straightish or but slightly convex; anterior side the longer, its extremity rounded when the straightish

dorsal edge (which is slightly incurved near the beaks) is moderately sloping, when but little sloping obtuse; posterior extremity very obtusely biangulated, or attenuated and obtuse; beaks acute prominent and incurved; fold tolerably distinct; ligament small narrow and sunken; teeth obsolete.

Ceylon and Isle of Negros, Philippines; (Cuming).

This is not the *T. angulata* of Linnæus, which I believe to be a *Psammobia*.

201. *TELLINA GUBERNACULUM* (pl. lxii. f. 186.) *Hanley*, Zool. Proc. 1844.

*T. testâ subovatâ, subinæquivalvi, tenui, compressiusculâ, lævi, extus intusque albidâ, valdè inæquilaterali; margine ventrali convexiusculo, anticè sursum acclinato; dorsali anticè magis minusve convexo et declivi, posticè recto brevi et subito declivi; extremitate lateris antici longioris rotundato-attenuatâ; extremitate posticâ brevissimâ, truncato-cuneiformi; flexurâ costâque umbonali obsolete; ligamento infosso; dentibus parvis.*

Var. *Testâ magis elongatâ; latere postico brevissimo; margine dorsali posticè maximè declivi, anticè subrecto.*

Subovate, rather inequivalve, thin, somewhat compressed, smooth, whitish, very inequilateral; ventral edge moderately convex, sloping upwards in front; dorsal more or less convex and sloping anteriorly, but short straight and abruptly declining posteriorly; anterior side produced, its extremity attenuated and rounded; posterior side extremely short and truncato-cuneiform; fold and flexure obsolete; ligament sunken; teeth small.

Var. More elongated; hinder side extremely short; dorsal edge nearly straight in front, most abruptly sloping behind.

Real Lejos, Central America (Cuming).

202. *TELLINA TRUNCATA*. (pl. lxii. f. 198.) *Jonas*, Ab. und Bes. Conch. part 3. t. 5. f. 2.

*T. testâ ovali-subtrigonâ, solidiusculâ, subinæquivalvi, subventricosâ, subimpolitâ, extus intusque albâ, sublævigatâ, valdè inæquilaterali; margine ventrali subrecto; dorsali anticè convexiusculo et declivi aut subdeclivi, posticè recto subelongato et valdè declivi; latere antico producto, ad extremitatem rotundato-attenuato; latere postico subcuneiformi, ad extremitatem angusto et subangulato; flexurâ subobsoletâ; ligamento magno, infosso; dentibus primariis distinctis.*

Oval-subtriangular, tolerably strong, slightly inequivalve, rather ventricose, rather dull white, nearly smooth, very inequilateral;



ventral edge nearly straight; anterior side attenuated, produced and rounded, its dorsal edge sloping and tolerably convex; posterior side nearly wedge-shaped, the extremity narrow and subangulated, the dorsal edge straight, rather long in proportion and strongly sloping; flexure almost entirely obsolete; ligament large and sunken; inside white; teeth distinct.

Bay of Manilla (Cuming).

Not unlike *Gubernaculum* but the hinder side in that species is less wedge-shaped, the tip being broader, and the ligamental edge decidedly shorter.

203. *TELLINA PELLUCIDA* (pl. lix. f. 118.) *Philippi*, Ab und. Bes. Conch. part 3. t. 5. f. 4.

T. testâ ovatâ aut obovatâ, tenui, inæquilaterali, convexâ, nitidâ, extus intusque nivêâ, lævigatâ; margine ventrali convexo, posticè sursum acclinato; dorsali anticè convexo et paulo declivi, posticè convexusculo et declivi; extremitate lateris antici longioris rotundatâ; extremitate posticâ obtusâ aut rotundatâ; natibus acutis, haud prominentibus; ligamento fulvo, infosso; costâ umbonali obsoletâ; dentibus angustis, minimis.

Var. Testâ abbreviatâ; margine dorsali utrinque magis declivi et minus convexo.

More or less ovate, thin, decidedly convex, inequilateral, pure glossy white both within and without, smooth, or with a few lines of growth; anterior side the longer, its extremity rounded, its dorsal edge convex and but little sloping; hinder side clearly the shorter, its dorsal edge sloping and but slightly convex, tip obtusely rounded; ventral edge convex (or even subarcuated) and inclining upward posteriorly; ligament yellow and sunken; beaks acute but not prominent; umbonal ridge obsolete; teeth minute.

Var. Abbreviated; the dorsal edges more sloping and less convex.

Bay of Manilla (Cuming).

204. *TELLINA CHINENSIS* (pl. lvi. f. 18.) *Hanley*, Zool. Proc. 1844.

T. testâ ovali, solidiusculâ, convexâ, subinæquilaterali, impolitâ, extus intusque candidâ, lævigatâ; margine ventrali subrecto; dorsali anticè convexusculo et paululum declivi, posticè subrecto satisque declivi; extremitate posticâ obtusâ; latere antico longiore, rotundato; ligamento —?; costâ umbonali obsoletâ.

Oval, tolerably strong, convex, slightly inequilateral, dull white, smooth; ventral edge nearly straight; anterior side the longer,

rounded at its extremity, its dorsal edge scarcely at all sloping and moderately convex; posterior extremity obtuse, the hinder dorsal edge moderately sloping and nearly straight; ligament —?; umbonal ridge obsolete; inside white.

China (Mus. Brit.).

205. *TELLINA FRIGIDA* (pl. lix. f. 119.) *Hanley*, Zool. Proc. 1844.

T. testâ ovali, solidiusculâ, convexâ, inæquilaterali, nitidâ, albidâ (intus candidâ), lævigatâ, utrinque rotundatâ; margine ventrali convexo; dorsali antico subdeclivi, convexo; latere postico planè breviorè; natibus inconspicuis; flexurâ costâque umbonali obsoletis; dentibus minimis.

Oval, tolerably strong, convex, inequilateral, glossy, whitish, smooth, rounded at each extremity; ventral edge convex; front dorsal convex and moderately sloping; posterior side decidedly the shorter; beaks not prominent; fold and flexure obsolete; teeth minute; inside white.

Kamtschatka.

206. *TELLINA GRANDIS* (pl. lxxv. f. 247.) *Hanley*, Zool. Proc. 1844.

T. testâ ovali, subtrigonâ, solidâ, subinæquivalvi, lævi, convexâ, subimpolitâ, extus intusque albidâ, anticè rotundatâ; margine ventrali convexiusculo; dorsali utrinque declivi, posticè recto aut subrecto, anticè vix convexiusculo; extremitate lateris antici brevioris obtusâ; flexurâ costâque umbonali subobsoletis; ligamento magno

Subtriangularly oval, solid, slightly inequivalve, convex, smooth, rather of a dull white under an almost imperceptible epidermis, which is only visible near the but little convex ventral margin; anterior side clearly the longer, its extremity rounded, its dorsal edge but little convex and moderately sloping, ligamental edge straight, and strongly sloping; posterior termination obtuse; fold and flexure almost entirely obsolete; inside white, the hinge-plate strong, the teeth of a moderate size.

Tumbez, Peru.

207. *TELLINA SECTA* (pl. lxxv. f. 245, 248.) *Conrad*, Jour. Ac. N. S. Philad. vol. vii. p. 257. Hanl. Des. Cat. p. 67.

T. testâ solidiusculâ, inæquivalvi, nitidâ, extus intusque candidâ, lævigatâ; alterâ valvulâ convexâ, alterâ complanatâ; margine ventrali subarcuato; dorsali utrinque haud multum declivi,

et prope ligamentum magnum inciso; extremitate anticâ rotundatâ; costâ umbonali magis minusve conspicuâ; dentibus primariis distinctis; margine cardinali sub ligamento intus incrassato, superficie internâ impolitâ.

*Testâ seniore* obovali, æquilaterali; margine dorsali subhorizontali, convexiusculo; latere antico lato; extremitate posticâ obtusâ; margine postico angulum obtusum cum margine ventrali formante; ligamento maximo.

*Testâ juniore* sicut in seniore, sed ovali, inæquilaterali; margine dorsali antico subdeclivi; latere antico longiore, attenuato.

Var. *Testâ ovali*, inæquilaterali, margine dorsali antico subdeclivi; latere antico longiore, plerumque ad extremitatem attenuato; extremitate posticâ angulatâ; margine ventrali posticè subincurvato et magis sursum acclinato.

Inequivalve, tolerably strong, smooth, glossy, rounded in front; one valve convex, the other flattened; ventral margin subarcuated; dorsal edges not greatly sloping, near the large ligament (under which the hinge margin is internally thickened) with an incision; umbonal ridge more or less conspicuous; teeth distinct.

*Adult.* Oboval, equilateral, hinge-margin subhorizontal and slightly convex; anterior side broad; hinder extremity obtuse; posterior edge forming one obtuse angle with the ventral; ligament very large.

*Young.* Resembling the adult, but oval and inequilateral; the front dorsal edge moderately sloping; anterior side the longer, attenuated at its termination.

Var. Oval, inequilateral; front dorsal edge moderately sloping; anterior side the longer, and generally attenuated at its extremity; posterior end angulated, the hinder ventral edge being somewhat incurved and sloping upward.

California.

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To this section belong, likewise, the *T. lateralis* and *brevifrons* of Say, which, however, I am unable to identify; and as the species have not been recognised by any subsequent conchologists, and are unknown even to the naturalists of the United States, I cannot, consequently, add to descriptions which will not exactly apply to any Tellens I am acquainted with.

“*TELLINA LATERALIS*, Say, Journ. Ac. Nat. Sci. Philad.

Transversely subovate, subequilateral; posterior (anterior) mar-

gin regularly rounded, anterior (posterior) margin beaked, the rostrum turned to the left and slightly gaping, ligament slope straight; basal margin regularly arcuated, a little contracted near the beak; valves whitish, often tinged with ferruginous, with small concentric wrinkles and slight waves; within white, a little sculptured by the external waves; no lateral teeth, two cardinal in one valve, and one with another hardly elevated filiform one in the other.

South coast of the United States."

TELLINA BREVIFRONS *Say*, Am. Conch. t. 64. f. 1.

Ovate, thin, fragile, not very convex, white, tinged particularly on the umbo with pale dull fulvous; with transverse (concentric) slender striæ, and in a particular light obsolete longitudinal (radiating) striæ are visible; beaks much anterior (posterior) to the middle, forming an angle in consequence of the anterior and posterior hinge-margin being rectilinear to a considerable distance, the latter parallel to the base; anterior (posterior) side short and abrupt, rounded at the tip, and with a submarginal undulation; posterior (anterior) side more than as long again as the anterior (posterior), rounded at tip; within much more deeply coloured with fulvous! cardinal teeth, two in the left and one in the right valve; lateral teeth none."

The shell is represented in the drawing as nearly an inch long, of a pale rose-colour (!), and of a subelliptical contour, a shape neither agreeing with the description nor with the further statement that "its outline corresponds with *T. donacina*, but is more convex" (!). I regard it as a very doubtful and ill-defined species. A single specimen only has been met with by Dr. Ravenel in South Carolina.

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The *T. lutea* of Conrad, which, being described in company with recent shells, I had introduced into my 'Descriptive Catalogue,' I have since ascertained to be fossil.

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## TELLINA.

## LIST OF PLATES LVI. TO LXVI.

## PLATE LVI.

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## MONOGRAPH OF THE GENUS

LINGULA, *Brug.*

BY G. B. SOWERBY, F.L.S., ETC.

*Char. Gen.* Testa tenuis, subæquivalvis, æquilateralis, ovato-elongata, depressa, apice subtruncato, basi subacutâ, pediculo affixâ. Impressiones musculares in utrâque valvâ quatuor, ad utrumque latus duæ, altera basalis, altera subcentralis.

Shell thin, consisting for the most part of a horny epidermis, lined with a small quantity of calcareous matter within; its general form when the valves are closed is an elongated oval, compressed and much resembling a duck's bill, (whence the specific appellation of the first known species). The two valves are very nearly equal, the dorsal being somewhat thicker and more acuminate at the base. When in a state of rest, the two valves are closed at the edges in all parts. There is neither ligament nor hinge, the two valves being held together by the adductor muscles. Muscular impressions several in each valve, arranged in pairs, one pair nearly central, another toward the posterior part, and a third, small and double, close to the posterior apex. The shell is attached by a peduncle which is fixed within the apex of the dorsal valve.

Of recent species seven are here described and figured, more than double that number are known in a fossil state, as characterizing the various secondary and tertiary deposits.

## DESCRIPTIONS.

1. LINGULA ANATINA (pl. lxvii. f. 1, 2, 3, 9, 10.) *Lam.*

L. testâ oblongâ, compressâ, longitudinaliter substriatâ, apicis basisque valvarum latitudine æquali, apice subtrilobo, valvâ ventrali medio intùs longitudinaliter incrassatâ.

Shell oblong, compressed, slightly striated longitudinally, equal



in width at both ends; apex somewhat trilobate; ventral valve longitudinally thickened near the centre within.

Fig. 1 represents the usual variety with its peduncle. Fig. 2, inside of the dorsal valve. Fig. 3, inside of the ventral valve. Fig. 9, a variety of a brown colour, found in sand at low water, at the Island of Siquijor, by Mr. Cuming. Fig. 10, a dark coloured variety.

From the Indian Ocean and the Moluccas, H. Cuming.

2. *LINGULA HIAN*s (pl. lxvii. f. 4.) *Swains.*

*L. testâ elongato-oblongâ, tenuissimâ, angustiori, prope basin paulatim attenuatâ, convexiusculâ.*

Shell of a lengthened oblong form, very thin and rather narrow, slightly attenuated and rather convex toward the base.

Distinguished from *L. anatina* by being much thinner and of a more delicate green colour; it is also slightly and gradually attenuated toward the base; it only gapes at the extremities when the valves are separated from the animal and dried.

3. *LINGULA AUDEBARDI* (pl. lxvii. f. 5.) *Brod. Zool. Proc.* 1833. p. 100.

*L. testâ elongato-oblongâ, glabrâ, pallidè flavâ, viridi transversim pictâ, margine antico rotundato, viridi.*

"The rounded anterior edge of this shell is given and the transverse lines of that colour are produced by the progressive increase of the shell which is small and parchment like. In all the dried specimens the thin anterior edge is contracted into a square form, but in its natural state this edge is rounded. A general contraction moreover gives the dried shells a narrower and more ventricose character than they really possess, and the remains of the *cilia* of the mantle give to their edges a bearded appearance."—*Brod.*

Found by Mr. Cuming in hard coarse sand at about half tide, from four to six inches below the surface, at the Island of Punam in the Bay of Guayaquil.

4. *LINGULA SEMEN* (pl. lxvii. f. 11.) *Brod. l. c.*

*L. testâ ovato-oblongâ, crassiusculâ, planâ, albidâ, lævissimâ, politâ, margine antico rotundato.*

Shell ovate-oblong, thickish, flattened, whitish, very smooth and polished; anterior margin rounded.

"This shell is much firmer than is usual to *Lingula*, so firm indeed as not to have contracted at all in drying. In size and appearance it bears a near resemblance to a melon seed."—*Brod.*

Dredged off the Isle of Plata, West Columbia; H. Cuming.

5. *LINGULA TUMIDULA* (pl. lxvii. f. 7.) *Reeve*, Zool. Proc. 1841. p. 100.

L. testâ tenui, corneâ, subquadrâtâ, latâ, rufescente-olivaceâ, radiatim irregulariter striatâ, apice subtrilobo.

Broader in proportion than any other known species; it is somewhat narrower toward the base than at the apex, and it is irregularly and somewhat radiately striated from the base to the broad and subtrilobate apex.

New Holland.

*Lingula compressa* of *Reeve* is only a badly preserved specimen of this species. Masbate, H. Cuming.

6. *LINGULA OVALIS* (pl. lxvii. f. 8.) *Reeve*, Zool. Proc. 1841. p. 100.

L. testâ oblongo-ovali, subcompressâ, tenui, anticè rotundatâ.

Distinguished from other species by its regularly oblong-oval shape, both ends being nearly similar.

Sandwich Islands, H. Cuming.

7. *LINGULA ALBIDA* (pl. lxvii. f. 6.) *Hinds*, Moll. Voy. of the Sulphur, p. 71. t. 12. f. 4.

L. testâ oblongâ, lævi, complanatâ, anticè truncatâ, ubique albidâ; pediculo brevi, cylindræo.

"This species is distinguished by its uniform dead white colour, and very short pedicle, which does not exceed half the length of the shelly portion."—*Hinds*,

Bay of Magdalena, California.

#### EXPLANATION OF PLATE LXVII.

1. 2. 3. *Lingula anatina*, Sp. 1.

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5. ——— Audebardi, 3.

6. ——— albida, 7.

7. ——— tumidula, 5.

8. ——— ovalis, 6.

9. ——— anatina, var. 1.

10. ——— anatina, var. 1.

11. ——— semen, 4.



## MONOGRAPH OF THE GENUS

## TEREBRATULA,

BY G. B. SOWERBY, F.L.S., ETC.

*Char. Gen.* Testa inæquivalvis, æquilatera, ovata vel subtrigona, pediculo brevi, tendineoque affixa; valva dorsalis posticè plus minùsve producta, sæpe recurva, apice perforato, foramine vel integro vel incompleto; cardo dente in utroque latere unico; valva ventralis intus ossiculo testaceo, gracili, plerumque furcato, variè flexuoso, e cardine nascente instructa.

Shell inequivalve, equilateral or symmetrical, very variable in general form (the same species varying greatly in its different stages of growth,) being sometimes nearly egg-shaped, sometimes very flat, but generally rather ventricose; it is attached to submarine rocks, stones, corals, shells, &c. by a short tendinous peduncle formed of strong, closely united fibres, which are however frequently a little separated at the attached end; this peduncle passes into the shell through the perforation of the dorsal valve. The posterior apex of the dorsal valve is more or less produced, frequently recurved and perforated at its termination or deeply notched at its anterior edge, with a small curved tooth on each side of its hinge, which fits into a corresponding hollow in the other valve in such a manner that the two valves cannot be separated without breaking these teeth or the edges of their sockets. The ventral valve is usually less ventricose than the dorsal, its posterior apex is very seldom even slightly produced, it is furnished within with a slender shelly appendage, which is sometimes simple, short, and recurved, sometimes of considerable length, branched and variously bent, so as to form several symmetrical loops: these generally commence on each side of the hinge, but sometimes near the centre of the shell, and they are sometimes united to the shell at other points. In many species the dorsal valve shows a distinct cardinal area somewhat resembling that of *Spondylus*, and in the centre of this are generally attached two little triangular



appendages called deltidia, which are in some species united together in the middle, in which case the perforation is rendered entire ; when they are separated it is incomplete : these deltidia are of an elongated form and continue from the anterior margin of the cardinal area to the apex in those species (*T. psittacea* and *T. nigricans*) that have a pointed beak. It is also to be remarked that these species are not punctated on the surface as all other species are.

*Terebratula* was formerly placed among his *Anomiæ* by Linné ; it is however very easily distinguished from the legitimate *Anomiæ*, by its regularity, its produced beak, its being attached by a fibrous peduncle and by its internal appendage. The recent species of the genus are found in all climates, and they are for the most part very abundant in all localities where they occur.

We have never been able to meet with *T. rotundata* of Lam. represented in Encycl. méth. t. 239. f. 5.

## DESCRIPTIONS.

### *Impunctatæ.*

#### 1. TEREBRATULA PSITTACEA (pl. lxxi. f. 78, 79, 80.) Lam.

Testâ subglobosâ, posticè acuminatâ, tenui, nigricante, valvis inæqualibus, radiatim concinnè striatis, lineâ marginali ex umbones declivi, demùm ascendente et anticè valdè sinuatâ ; valvâ dorsali posticè acutâ, recurvâ, anticè deflexâ, sulco mediano lato, indistincto, foramine trigonali, haud integro ; areâ cardinali inconspicuâ, rotundatâ, deltidiiis angustis, ad lateres foraminis coalescentibus ; valvâ ventrali ventricosâ, anticè latiori, carinâ medianâ inconspicuâ, ad marginem anticum solummodo distinctâ ; dentibus cardinalibus internis ex umbonem porrectis recurvis duobus ad utrumque latus uno : margine valvarum integerrimo.

From Labrador, where it is found in abundance in the mud on the shore at low water : dredged alive at Melville Island by Lieut. Griffith.

#### 2. TEREBRATULA NIGRICANS (pl. lxxi. f. 81, 82.) nobis.

Testâ anticè rotundatâ, posticè acuminatâ, tenuiusculâ, nigricante, valvis inæqualibus, radiatim costatis, costis rotundatis, lineâ marginali rectiusculâ ; valvâ dorsali subtrigonâ, depressiusculâ ; anticè rotundatâ, lateribus posticis declivibus, foramine magno, haud integro, quadrato ; areâ cardinali magnâ, planiusculâ, lateribus

rotundatis ; deltidiis angustis ad lateres foraminis coalescentibus ; valvâ ventrali depressâ, transversim ovatâ ; dentibus cardinalibus ut in *T. psittacæ* ; margine valvarum crenulato.

A single specimen of this very interesting species was found in the collection of the late G. Humphrey, without locality. This and the *T. psittacea* are the only species that are not punctated.

*Punctatæ.*

3. TEREBRATULA CAPUT-SERPENTIS (Pl. lxxviii. f. 1 to 4. and Pl. lxxii. f. 116.) *Lam.*

Testâ ovatâ, rotundato-subpentagonali, albicante ; valvis subæqualiter convexis, longitudinaliter radiatim costellatis, costellis bifurcatis, granuliferis ; lineâ marginali lateralitèr flexuosâ, anticè subemarginatâ ; valvâ dorsali subrostratâ, foramine mediocri, haud integro, obliquo ; arcâ cardinali subdepressâ, deltidiis ferè obsoletis ; ossiculo interno (valvæ ventralis) parvo,  $\frac{1}{3}$  longitudinis valvæ, anticè arcuato, fornicato ; margine interno valvarum minutissimè crenulato.

Shell ovate, of a rounded somewhat pentagonal figure, whitish ; valves nearly equally convex, longitudinally and radiately costellated, the little ribs being dichotomous and granulated ; marginal line flexuous on the sides, slightly emarginate in front ; dorsal valve somewhat beaked, with a moderate sized perforation, which is oblique and not entire ; the cardinal area is rather flattened and the deltidia are nearly obsolete : internal appendages, (which are always attached to the ventral valve) small, about  $\frac{1}{3}$  the length of the shell, arched in front and vaulted ; internal edge of the valves very minutely crenulated.

This species, which is found on most of the northern coasts of Europe, and which abounds on some of our own coasts, is also found in the Mediterranean. It appears to us, however, to be distinguishable without difficulty from the North American species described by Couthouy under the name of *T. septentrionalis*. In different stages of growth and under peculiar circumstances it has had several names assigned to it, thus a young shell has been named *T. costata* by Lowe, and *T. aurita* by Fleming ; and specimens covered with an apparently pubescent epidermis (or a minute hairy zoophyte ?) have been named *T. pubescens* by Müller. We have represented the emarginated variety from the Mediterranean at fig. 1 ; the entire and more gibbous variety from Oban at fig. 2 ; the emarginated variety from Loch Fine at fig. 3 ; the rather compressed and pubescent variety from the Norwegian coast at fig. 4 ; and the nearly quadrangular variety at fig. 116.

4. *TEREBRATULA SEPTENTRIONALIS* (pl. lxviii. f. 5, 6.) *Couth.*

Testâ subovatâ, posticè subacuminatâ, obtusâ, albicante; valvis subæqualiter convexis, longitudinaliter radiatim costellatis, costellis tenuissimis bifurcatis, subrugosis; lineâ marginali lateribus flexuosis, anticè rectiusculâ; foramine majusculo, haud integro, subobliquo; areâ cardinali subdepressâ, deltidiiis parvis, ferè obsoletis; ossiculo interno parvo,  $\frac{2}{3}$  longitudinis valvæ, anticè arcuato, supernè ramulo ad utrumque latus, in medium connexis; margine interno valvarum minutissimè crenulato.

Shell subovate, slightly acuminate but obtuse posteriorly, nearly white; valves nearly equally convex, longitudinally radiately costellated, the little ridges very slender, dichotomous and roughish: marginal line flexuous on the sides, nearly straight in front: perforation rather large, not complete; somewhat oblique; cardinal area rather flattened, with small, nearly obsolete deltidia; internal appendages small,  $\frac{2}{3}$  of the length of the valve, arched in front with a little branch above on each side, joined in the middle; inner margin of the valves minutely crenulated.

Distinguished from *T. Caput-serpentis* by its much finer radiating striæ, its larger and less oblique foramen, and by its rather more extended and somewhat differently formed internal appendage. We have represented two varieties from the coast of Maine, Massachusetts, obligingly forwarded by Dr. Gould of Boston.

5. *TEREBRATULA JAPONICA* (pl. lxviii. f. 7, 8.) *nobis.*

Testâ oblongâ, anticè rotundatâ, tenui, albicante, valvis subæqualiter convexis, longitudinaliter radiatim striatis, striis numerosis, subirregularibus, subbifurcatis ad lateres prope cardinem conferiusculis; lateribus prope cardinem subplanulatis; lineâ marginali rectiusculâ, ad lateres posticè declivi; valvâ dorsali posticè subproductâ, truncatâ, foramine mediocri, haud integro, perobliquo; areâ cardinali inconspicuâ, deltidiiis obsoletis; ossiculo interno parvo,  $\frac{1}{3}$  longitudinis valvæ, ramulos duos angustos, demum amentum latum flexuosum sistente: marginibus valvarum minutissimè denticulatis.

Shell oblong, rounded in front, thin, whitish, valves nearly equally convex, longitudinally radiately striated, striæ numerous, rather irregularly dichotomous and very close-set on the sides near the hinge; the sides near the hinge rather flattened; marginal line nearly straight, inclining to the sides near the hinge; dorsal valve somewhat produced posteriorly and truncated, with a moderate sized very oblique and incomplete perforation; cardinal area indistinct, with obsolete deltidia; internal appendages small,  $\frac{1}{3}$  the

length of the valve, with two narrow little branches and then a broad flexuous loop; margin of the valves very minutely denticulated.

In Mr. Cuming's collection; from Japan. Easily distinguished from *T. cancellata* of Koch, by its foramen not being entire.

6. *TEREBRATULA RUBRA* (pl. lxxviii. f. 9, 10, 11), *Pallas*. *T. sanguinea*, *Leach* and *Lam.*; *T. Capensis*, *Chemn.*

Testâ rotundato-subquadrangulâ, tenuisculâ, rubrâ; valvis inæqualiter convexis, (dorsali gibbosâ, ventrali planiusculâ,) radiatim costatis, costellis plerumque simplicibus; lineâ marginali ad lateres rectiusculâ anticè subflexuosâ; valvâ dorsali subproductâ, obliquè truncatâ, foramine magno, haud integro; areâ cardinali angustâ, declivi, deltidii parvis; valvâ ventrali posticè latâ, margine rectiusculo; ossiculo interno ramulos duos centrales divergentes, ad apices expansos sistente; margine valvarum crenulato.

Shell of a rounded somewhat quadrangular form, ventricose, rather thin and of a deep red colour; valves unequally convex (the dorsal being gibbous and the ventral rather flattened,) radiately ribbed, the ribs being for the most part simple; marginal line nearly straight on the sides, somewhat flexuous anteriorly; dorsal valve slightly produced, obliquely truncated, with a large incomplete perforation; cardinal area narrow, inclined, with small deltidia; ventral valve broad posteriorly, with a nearly straight margin; internal appendages consisting of two central diverging branches somewhat spread out at their ends; margin of the valves crenulated.

From South Africa. Fig. 9 and 11 show the ventral and dorsal valves from a specimen in the British Museum: fig. 10 shows the internal ossicle.

7. *TEREBRATULA PISUM* (pl. lxxix. f. 37 to 39.) *Lam.* *T. Natalensis*, *Kuster*.

Testâ transversim subovatâ, rufescente; valvis subæqualibus, radiatim obsoletè liris, liris paucis, obtusis, rotundatis; lineâ marginali rectâ, anticè profundè sinuatâ; valvâ dorsali paulispèr productâ, obtusissimâ; foramine magno, haud integro; areâ cardinali parvâ, lineari; deltidii parvis, subtrigonulis; carinâ medianâ latâ, magnâ, rotundatâ; valvâ ventrali posticè latiusculâ, margine postico rectiusculo; sulco mediano magno, lato, rotundato; margine valvarum obsoletissimè subcrenulato; ossiculo interno ut in *T. rubrâ* *Pall.*

Shell transversely subovate, slightly reddish; valves nearly equal, with rather obsolete radiated ridges, which are few, obtuse, and



rounded; marginal line straight, deeply sinuated in front; dorsal valve slightly produced, very obtuse; with a large incomplete perforation; cardinal area small, linear; deltidia small, nearly triangular, central keel broad, large and rounded; ventral valve rather broad posteriorly, its posterior margin nearly straight; with a large, broad and rounded ventral groove; internal appendages as in *T. rubra*; margin of the valves very slightly crenulated.

Brought from Natal by Dr. Krauss; a comparison with the Lamarckian specimen has proved this to be his *T. Pisum*; it has nevertheless been described under the name of *T. Natalensis* by Kuster. Also found at Sydney by Mr. Jukes.

8. *TEREBRATULA COGNATA* (pl. lxviii. f. 12, 13, 14.) *Chemn.* vol. viii. pl. 78. f. 688. *a, b.*

Testâ subtrapezoidali, anticè rotundatâ, pallescente, nonnunquam rubente; valvis inæqualibus, radiatim obsoletè striatis, striis versus marginem oblitteratis; lineâ marginali lateraliter antice-que flexuosâ, valvâ dorsali convexâ, lirâ medianâ inconspicuâ; apice subacuminato, reflexo, foramine magno, haud integro, areâ cardinali angustâ, deltidiis parvis, trigonalibus; valvâ ventrali planulatâ, margine postico rectiusculo, sulco mediano subperspicio, ossiculo interno ramulos duos centrales divergentes, ad apices expansos sistente; margine interno valvarum denticulato.

Shell nearly trapezoidal, rounded in front, of a pale colour, sometimes reddish; valves unequal, obsoletely radiately striated, the striæ entirely obliterated near the margin; marginal line flexuous in front and on the sides; dorsal valve convex, with an inconspicuous central ridge, its apex somewhat acuminate, reflected, with a large incomplete perforation; cardinal area narrow, deltidia small, triangular; ventral valve flattened, its posterior margin nearly straight, with a scarcely evident central furrow; internal appendages consisting of two little central diverging branches, expanded at their apices; margin of the valves denticulated within.

We have two varieties in colour; from South Africa, according to the late G. Humphrey.

9. *TEREBRATULA DORSATA* (pl. lxviii. f. 15, 16, 17.) *Lam.*

Testâ suborbiculato-trapezoidali, gibbosâ, albicante, valvis inæqualibus, radiatim liratis, lineâ marginali flexuosâ; valvâ dorsali posticè subacuminatâ, reflexâ, truncatâ, carinâ medianâ latâ, obtusâ, foramine medioeri, haud integro; areâ cardinali magnâ, latâ, subplanulatâ, deltidiis parvis, trigonalibus; valvâ ventrali subtrigonalis, apice subacuto, marginibus posticis declivibus, sulco mediano lato subperspicio, ossiculo interno magno,  $\frac{3}{4}$  testæ longitudinis, posticè

ad utrumque latus aculeifero, deinde ad medium valvæ decurrente, et amenta dua lateralia, demùm amentum superum magnum reflexum efformante; margine valvarum crenulato.

Shell of a suborbicular trapezoidal form, rather gibbous, whitish, valves unequal, radiately ridged; marginal line flexuous; dorsal valve slightly acuminated posteriorly, reflected, truncated, with a broad obtuse central ridge, and a rather large, but not complete perforation; cardinal area large, broad, rather flattened, with small triangular deltidia; ventral valve rather trigonal, with a rather acute apex, its posterior margins inclined laterally; with a broad, not very distinct longitudinal central groove; internal appendage large,  $\frac{3}{4}$ ths the length of the valve, with a sharp point standing out from the posterior part, then running down to the centre of the valve, and forming two lateral loops, which turn upwards and unite after forming a large superior loop; margin of the valves crenulated.

From the Straits of Magalhaens: common.

10. *TEREBRATULA CHILENSIS* (pl. lxviii. f. 18, 19). *Brod. Zool. Proc.*, Nov. 1833, p. 134.

Testâ suborbiculari, subtransversâ, subgibbâ, pallescente, valvis subæqualiter convexis, radiatim liratis, liris obtusis, haud prominentibus; lineâ marginali rectiusculâ, anticè sinuatâ; valvâ dorsali posticè obtusâ, lateribus declivibus, carinâ medianâ latâ, obtusissimâ, foramine magno, subintegro; areâ cardinali magnâ, latâ, planulatâ, deltidii mediocribus, trigonalibus; valvâ ventrali transversim ovatâ, subplanulatâ, sulco mediano lato, perspicuo; ossiculo interno magno,  $\frac{3}{4}$  testæ longitudinis, amenta ut in *T. dorsatâ* efformante; margine valvarum obsoletè subcrenulato.

Shell suborbicular, somewhat transverse and slightly gibbous, of a pale colour; valves nearly equally convex, with numerous obtuse scarcely prominent ridges; marginal line nearly straight, sinuated in front; dorsal valve obtuse posteriorly, with inclined sides and a broad, very obtuse longitudinal central keel, perforation large, nearly entire, cardinal area large, broad and flattened, deltidia of moderate size, triangular; ventral valve transversely ovate, rather flattened, with a broad, distinct central groove; internal appendage large,  $\frac{3}{4}$ ths the length of the valve, forming loops as in *T. dorsata*; margin of the valve rather crenulated.

From the Bay of Valparaiso; Cuming.

11. *TEREBRATULA FLEXUOSA* (pl. lxix. f. 23, 24.) *King. Zool. Journ.*, vol. v, p. 337.

Testâ subtetragonâ, rotundatâ, subgibbâ, fuscescente pallidâ;

valvis inæqualibus, radiatim liris, liris prominentibus, obtusis, lineâ marginali lateraliter subflexuosâ, anticè sinuatâ; valvâ dorsali ad apicem obtusâ subreflexâ, lateribus declivibus, carinâ medianâ latâ, obtusissimâ; foramine magno, haud integro; areâ cardinali magnâ, latâ, planulatâ; deltidii mediocribus, trigonalibus; valvâ ventrali latiori quam longâ, subplanulatâ, sulco mediano lato, subinconspicuo; ossiculo interno magno,  $\frac{3}{4}$  testæ longitudinis, amenta ut in *T. dorsatâ* efformante; margine valvarum crenulato.

Shell rounded subtetragonal, rather gibbous, of a palish brown; valves unequal, with radiating prominent obtuse ridges; marginal line somewhat flexuous on the sides, sinuated in front; dorsal valve rather obtuse and reflected posteriorly, its sides inclined towards the front, with a broad, very obtuse mesial ridge, perforation large, not complete; cardinal area large, broad and flattened; deltidia small and triangular; ventral valve broader than long, rather flattened, mesial groove broad, but rather indistinct; internal appendage large,  $\frac{3}{4}$ ths the length of the valve, forming loops as in *T. dorsata*; margin of the valves crenulated.

Found in the Straits of Magalhaens, in the vicinity of Port Famine; rare; Capt. King, Brit. Mus.

The last three here described, namely, *T. dorsata*, *T. Chilensis*, and *T. flexuosa* may prove to be merely varieties of the same species.

12. TEREBRATULA SOVERBII (pl. lxxviii. f. 20, 21, 22.) King. Zool. Journ. vol. v. p. 338.

Testâ rotundato-subtetragonâ, planiusculâ, ferrugineo-subfuscâ; valvis inæqualibus, glabris, obsoletissimè radiatim liris, liris inconspicuis; lineâ marginali subflexuosâ, anticè rotundato-sinuatâ; valva dorsali ad apicem obtusâ, subreflexâ, lateribus declivibus, carinâ medianâ subobsoletâ, latâ, rotundatâ; foramine magno, haud nitægro, areâ cardinali magnâ, latâ, planulatâ, deltidii mediocribus, trigonalibus; valvâ ventrali subplanulatâ, rotundato-subtrigonâ; sulco mediano lato, inconspicuo; ossiculo interno magno,  $\frac{3}{4}$  testæ longitudinis, amenta ut in *T. dorsatâ* efformante; margine valvarum obsoletissimè subcrenulato.

Shell of a rounded somewhat tetragonal form, flattish, of a rusty brownish colour; valves unequal, smooth, with very obsolete and inconspicuous radiated ridges; marginal line somewhat flexuous, with a rounded sinuosity in front; dorsal valve obtuse posteriorly, slightly reflected, with its sides inclined towards the front; mesial ridge rather obsolete, broad and rounded; perforation large, not entire, cardinal area large, flattened, deltidia small and

trigonal; ventral valve flattish, somewhat triangular, rounded; mesial groove broad, indistinct; internal appendage as in *T. dorsata*; margin of the valves very slightly crenulated.

Found by Capt. King in the Straits of Magalhaens. Brit. Mus.

13. *TEREBRATULA AUSTRALIS* (pl. lxix. f. 25-33.) Quoy. *T. dentata* and *flavescens*, Lam.

Testâ subovatâ, posticè subacuminatâ, plerumque gibbosâ, nonnunquam subplanatâ, albicante, flavescente, vel subfuscâ, valvis inæqualibus, glabris, plerumque plus minusve (nonnunquam obsoletissimè), radiatim sulcatis; lineâ marginali rectiusculâ, anticè plus minusve sinuatâ; valvâ dorsali posticè subacumiâtâ ad apicem obtusâ, reflexâ; carinâ medianâ latâ, inconspicuâ, foramine medio-cri, integro, areâ cardinali latâ, subinconspicuâ, marginibus rotundatis; deltidiiis magnis, coalescentibus; valvâ ventrali subcirculari, gibbosiusculâ, sulco mediano inconspicuo, lato; ossiculo interno magno,  $\frac{3}{4}$  testæ longitudinis, amenta ut in *T. dorsatâ* efformante, amento supero maximo; margine valvarum plerumque dentato, dentibus plus minusve numerosis, magnis vel parvis, nonnunquam rotundatis vel obsoletissimis, interdum maximis, præcipuè illis efformantibus lateres sulci mediani.

Shell nearly oval, slightly acuminate posteriorly, generally rather gibbous, sometimes slightly flattened, whitish, yellowish or brownish; valves unequal, smooth, generally more or less (sometimes very obsoletely), radiately grooved; marginal line nearly straight, more or less sinuated in front; dorsal valve somewhat acuminate posteriorly, obtuse, reflected, with a broad, indistinct mesial ridge; perforation of moderate size, entire, round; cardinal area broad, rather indistinct, with rounded edges; deltidia large, united in the middle; ventral valve nearly circular, gibbous, with a broad and indistinct mesial groove; internal appendage as in *T. dorsata*, the upper loop being very large; margin of the valves generally toothed, teeth more or less numerous, large or small, sometimes rounded, sometimes very obsolete, sometimes very large, particularly those which form the sides of the mesial furrow.

The varieties of this species are numerous, and they have been described under several names, we have preferred using that given by Quoy, as properly including all, and we have represented the following, viz.—fig. 25, 28, two views of a variety with few large radiated grooves and correspondingly few and large marginal teeth; fig. 26, 27, another variety with more numerous radiated grooves and consequent smaller and more numerous marginal teeth; fig. 29, 31, two views of a variety with rather obsolete



radiated grooves and rounded small marginal teeth; fig. 30, an unusually oblong and acuminate variety; fig. 32, a rather young shell with very slight traces of radiating grooves; fig. 33, another variety with obsolete grooves, obsolete marginal teeth and the posterior apex of the dorsal valve more lengthened and recurved.

14. *TEREBRATULA RECURVA* (pl. lxix. f. 34-36.) *Quoy*.

Testâ rotundato-subtrigonâ, gibbosâ, pallescente, valvis perinæqualibus, glabris, obsoletissimè radiatim sulcatis; lineâ marginali posticè lateralitèr flexuosâ, anticè subsinuâtâ; valvâ dorsali subacuminatâ, obtusâ, subrugosâ, ad apicem reflexâ; carinâ medianâ obsoletâ, foramine mediocri, integro; areâ cardinali latâ, subinconspicuâ, marginibus rotundatis, deltidiis magnis, coalescentibus; valvâ ventrali gibbosâ, transversim longiori, sulco mediano inconspicuo, lato; ossiculo interno ut in *T. australe*; margine valvarum undulato.

Shell rounded subtrigonal, gibbous, of a pale colour, valves very unequal, smooth, very obsoletely radiately grooved, marginal line flexuous posteriorly towards the sides, slightly sinuated in front; dorsal valve somewhat acuminate, obtuse, rather rugose, reflected; mesial ridge obsolete; perforation of moderate size, entire; cardinal area broad, rather indistinct, with rounded sides; deltidia large, united in the middle; ventral valve gibbous, broader than long; with an indistinct mesial furrow; internal appendages as in *T. Australis*; margin of the valves undulated.

This may be merely a variety of *T. Australis*, it may however be easily distinguished by its much recurved beak. Australia, Mr. Cuming.

15. *TEREBRATULA RUBELLA* (pl. lxix. f. 40-42.) *Sowb.*

Testâ subovatâ, posticè subacuminatâ, subgibbâ, anticè subsinuâtâ, rubrâ, valvis inæqualibus, glabris, lineâ marginali rectiusculâ, anticè subsinuâtâ; valvâ dorsali posticè subacuminatâ, reflexâ, carinâ medianâ nullâ, sulco mediano obsoletissimo, foramine parvo, areâ cardinali angustâ, ad lateres rotundatâ, deltidiis majusculis, coalescentibus; valvâ ventrali ovatâ, sulco mediano latiusculo, emarginationem anticam efformante; ossiculo interno ut in *T. australe*; margine valvarum lævissimo.

Shell nearly oval, rather acuminate posteriorly, a little gibbous and slightly sinuated anteriorly; valves unequal, smooth; marginal line nearly straight, a little sinuated in front; dorsal valve rather acuminate posteriorly, reflected, without any mesial ridge; but with a very obsolete mesial furrow; perforation small; cardi-

nal area narrow, rounded at the sides, with rather large united deltidia; ventral valve ovate, with a broad mesial groove forming a sinus in front; internal appendage as in *T. Australis*; margin of the valves quite smooth.

From Japan; in Mr. Norris's Collection.

16. *TEREBRATULA PICTA* (pl. lxx. f. 43, 44.) *Anomia picta*. *Chemn.* vol. xi. f. 2011, 2012.

Testâ ovatâ, posticè subacuminatâ, tenui, rubrâ, maculis albidis subradiatim pictâ, valvis subæqualibus, glabris, lineâ marginali rectâ, anticè obsoletissimè sinuatâ; valvâ dorsali posticè subacuminatâ, carinâ medianâ nullâ; apice subrecurvo; foramine parvo, integro; areâ cardinali parvâ, ad lateres rotundatâ, deltidiis parvis, angustis, coalescentibus; valvâ ventrali subplanulatâ, sulco mediano nullo; ossiculo interno magno; margine valvarum integerrimo.

Shell ovate, slightly acuminate posteriorly, thin, red, marked with somewhat radiated white spots, valves nearly equal, smooth; marginal line straight, very obsoletely sinuated in front; dorsal valve acuminate posteriorly, without any mesial ridge, its apex recurved, with a small entire perforation; cardinal area small, rounded laterally, with small, narrow, united deltidia; ventral valve flattish, without mesial furrow; internal appendage large; margin of the valves quite entire.

From Java; in Mr. Norris's and other Collections.

17. *TEREBRATULA RUBICUNDA* (pl. lxx. f. 45, 46, 47), *nobis*, *T. sanguinea*, *Quoy*, *Astr.*

Testâ suborbiculari, posticè subacuminatâ, gibbâ, glabrâ, rubrâ, valvis inæqualibus, subirregularibus; lineâ marginali ad lateres subflexuosâ, anticè sinuatâ; valvâ dorsali, posticè productâ, truncatâ, foramine magno, obliquo, subintegro; areâ cardinali rotundatâ; deltidiis magnis, distinctis; carinâ dorsali latâ, prominente, utrinque rotundato-angulatâ, obtusâ; valvâ ventrali subpentagonali, posticè angustiori, medianè latâ, rotundato-subangulatâ; anticè subtruncatâ, sulco mediano lato, conspicuo; ossiculo interno magno, fere ut in *T. dorsatâ* efformato; margine valvarum integro.

Shell nearly orbicular, rather acuminate posteriorly, gibbous, smooth, of a red colour; valves unequal, rather irregular; marginal line slightly flexuous on the sides, sinuated in front; dorsal valve produced behind, truncated, with a large, oblique, nearly entire perforation; cardinal area rounded, deltidia large, separate; mesial ridge broad, prominent, angularly rounded and obtuse on

both sides ; ventral valve somewhat pentagonal, narrow posteriorly, broad in the middle, with rounded angles, and slightly truncated in front ; mesial groove broad and distinct ; internal appendage as in *T. dorsata* ; margin of the valves entire.

From the Moluccas ; in Mr. Cuming's Collection and in the British Museum.

18. *TEREBRATULA CALIFORNICA* (pl. lxx. f. 50-52.) *Küst.*

Testâ suborbiculari, posticè subacuminatâ, gibbosâ, fuscescente, valvis subæqualibus, glabris ; lineâ marginali ex umbonem ascendente, demum rectiusculâ, anticè et medianè obsoletissimè sinuatâ : valvâ dorsali subrostratâ, apice brevi, subacuminato, reflexo ; foramine parvo, integro ; areâ cardinali latiusculâ, marginibus obtusè anguliferis ; deltidiiis oblongis, trigonalibus, coalescentibus ; carinâ medianâ nullâ ; valvâ ventrali orbiculari, sulco mediano nullo ; ossiculo interno magno,  $\frac{3}{4}$  testæ longitudinis, ferè ut in *T. dorsatâ* efformato ; margine valvarum integro.

Shell nearly orbicular, slightly acumined posteriorly, gibbous, light brown ; valves nearly equal, smooth, marginal line ascending from the apex and then straight, anteriorly and in the centre very obsoletely sinuated ; dorsal valve slightly beaked, apex short, slightly acumined, reflected ; perforation small, entire ; cardinal area rather broad, its edges obtusely angular ; deltidia oblong, triangular and united ; mesial ridge none ; ventral valve orbicular, without any mesial furrow ; internal appendages large,  $\frac{2}{3}$ ds the length of the shell, formed as in *T. dorsata* ; margin of the valves entire.

Abounds on the Coasts of California ; in Mr. Cuming's and other Collections. This is the largest recent species known.

19. *TEREBRATULA DILATATA* (pl. lxx. f. 48. 49.) *Lam. T. Gaudichaudi, De Blainv.*

Testâ suborbiculari, tenui, glabrâ, fulvescente ; valvis inæqualibus, lineâ marginali flexuosâ ; valvâ dorsali posticè subacuminatâ, reflexâ, obtusâ ; foramine magno, haud integro ; areâ cardinali majusculâ, planulatâ, lateribus obtusè angulatis, deltidiiis majusculis discretis ; carinâ dorsali obsoletissimâ ; valvâ ventrali suborbiculari ; ossiculo interno magno,  $\frac{3}{4}$  longitudinis testæ, ut in *T. Californicâ* efformato ; margine valvarum integro.

Shell nearly orbicular, thin, smooth, of a pale brownish colour ; valves unequal ; marginal line flexuous ; dorsal valve slightly acumined posteriorly, reflected, obtuse ; with a large incomplete perforation ; cardinal area rather large, flattened, with obtusely

angular sides, deltidia rather large, separate; mesial ridge very slight; ventral valve nearly orbicular; internal appendage large,  $\frac{2}{3}$ ths the length of the shell, formed as in *T. Californica*; margin of the valves entire.

In the British Museum and in Mr. Metcalfe's Collection.

20. *TEREBRATULA UVA* (pl. lxx. f. 53-55.) *Brod. Zool. Proc.* 1833, p. 124.

Testâ oblongâ, gibbosâ, glabrâ, subdiaphanâ, pallescente; valvis inæqualibus; lineâ marginali ex umbonem ascendente, demùm subflexuosâ; valvâ dorsali posticè subelongatâ, apice reflexo, truncato, foramine magno, integro, perobliquo, margine crasso; areâ cardinali inconspicuâ, rotundatâ; deltidiis parvis, coalescentibus, concavis; carinâ medianâ nulla; valvâ ventrali ovato-oblongâ, sulco mediano nullo; ossiculo interno parvo, radiis binis, ex cardinem extensis, ad apices expansis efformato; margine valvarum integro.

Shell oblong, gibbous, smooth, slightly diaphanous, pale in colour; valves unequal; marginal line ascending from the apex, then somewhat flexuous; dorsal valve posteriorly lengthened, with a reflected, truncated apex; perforation large, entire, very oblique, with a thickened margin; cardinal area indistinct, rounded; deltidia small, united, concave; ventral valve ovato-oblong; internal appendage formed of two rays setting off from the hinge and expanded at the ends; margin of the valves entire. This species is destitute of mesial ridge and furrow.

From the Gulf of Tehuantepec; in Mr. Cuming's Collection. The punctulation in this species is much coarser than in *T. vitrea*.

21. *TEREBRATULA VITREA* (pl. lxx. f. 56-59.) *Lam.*

Testâ rotundato-ovatâ, ventricosâ, subdiaphanâ, lævissimâ, albicante; valvis subæqualibus, lineâ marginali rectiusculâ; valvâ dorsali posticè rotundato-subacuminatâ, recurvâ; foramine parvo, integro, subobliquo, margine crasso; areâ cardinali inconspicuâ, rotundatâ; deltidiis inconspicuis, coalescentibus; carinâ medianâ nullâ; valvâ ventrali subcirculari, anticè rotundato-subtruncatâ, sulco mediano nullo; ossiculo interno parvo,  $\frac{1}{4}$  longitudinis testæ, anticè arcuato, fornicato; margine valvarum integerrimo.

Shell of a rounded ovate form, ventricose, slightly diaphanous, very smooth, whitish horn colour, valves nearly equal and marginal line nearly straight; dorsal valve rounded and slightly acuminate behind, recurved; perforation small, entire, rather oblique, with a thickened margin; cardinal area indistinct, rounded, with united indistinct deltidia; ventral valve nearly circular, slightly truncated



anteriorly ; internal appendage small,  $\frac{1}{4}$ th the length of the shell, anteriorly arched and vaulted ; margin of the valves entire : mesial ridge and furrow none.

From the Mediterranean ; in Mr. Cuming's and other Collections.

22. *TEREBRATULA CRANIUM* (pl. lxx. f. 60–62). *Müll.*

Testâ ovatâ, anticè subtruncatâ, posticè paulisper acuminatâ, gibbosâ, pallescente, subhyalinâ ; valvis æqualitèr convexis ; lineâ marginali flexuosâ, anticè subsinuatâ ; valvâ dorsali posticè subproductâ, subrecurvâ, obliquè truncatâ ; foramine magno, haud integro ; areâ cardinali inconpicuâ, rotundatâ ; deltidiis parvis, linearibus, distinctis ; valvâ ventrali planiusculâ, anticè subangulatâ ; ossiculo interno magno,  $\frac{2}{3}$  longitudinis testæ, amentis binis lateralibus, ad utrumque latus uno, demùm amento magno supero efformante ; margine valvarum integerrimo.

Shell ovate, anteriorly subtruncate, posteriorly slightly acuminate, gibbous, of a pale colour, somewhat diaphanous ; valves equally convex, marginal line flexuous, slightly sinuated in front ; dorsal valve somewhat produced posteriorly, slightly recurved, and obliquely truncated ; perforation large, incomplete ; cardinal area indistinct, rounded, with small linear, separate deltidia ; ventral valve slightly flattened, and somewhat angular in front ; internal appendage large,  $\frac{2}{3}$ ds the length of the valve, forming two lateral loops, one on each side, and then uniting to form one very large upper loop ; margin of the valves quite entire.

From the coast of Norway and the North Seas ; in Mr. Cuming's and other Collections. This species resembles *T. vitrea* in general appearance, it may however easily be distinguished by its large foramen which is not entire ; as well as by its extended internal appendage.

23. *TEREBRATULA TRUNCATA* (pl. lxxi. f. 64–67.) *Lam.*

Testâ transversim suborbiculari, depressâ, latere cardinis truncato, rectiusculo, pallescente, valvis subæqualibus, radiatim concinnè striatis, lineâ marginali subirregulari, rectiusculâ, anticè subsinuatâ ; valvâ dorsali posticè truncatâ, emarginatâ, foramine magno, haud integro, areâ cardinali elongato-trigonalì, planulatâ ; deltidiis minutis, inconspicuis ; carinâ medianâ parvâ ; valvâ ventrali subplanulatâ, posticè rectiusculâ, emarginatione medianâ parvâ ; sulco mediano latiusculo, subinconspicuo ; ossiculo interno valdè complicato, nonnunquam vario ; facie internâ radiatim graniferâ, granulis seriatim confertis, parvis ; margine valvarum integro.

Shell transversely suborbicular, depressed, truncated posteriorly and very wide, of a brownish colour, and with a nearly straight hinge line; valves nearly equal, very finely radiately striated; marginal line rather irregular, nearly straight and slightly sinuated in front; dorsal valve posteriorly truncated, notched, with a large incomplete foramen; cardinal area of a lengthened triangular shape, flattened, with minute, inconspicuous deltidia; mesial ridge small; ventral valve rather flattened, straight behind, with a small mesial notch, mesial groove rather broad, not very distinct; internal appendage in general very complicated, occasionally varying in form; internal surface radiately granular, the very small granules arranged in close set rows; margin of the valves entire.

Abounds on the coast of Sicily and in other parts of the Mediterranean.

24. *TEREBRATULA DECOLLATA* (pl. lxxi. f. 68-70.) *Desh.* *Anomia*, *Chemn.* vol. viii. p. 96. *A. detruncata*, *Gmel.*, *T. aperta*, *De Blainv.*, *T. detruncata*, *Phil.*

Testâ transversâ, anticè rotundatâ, posticè angulatâ, crassâ, fuscescente; valvis valdè inæqualibus, radiatim costatis, lævibus, costis obtusis, paucis, lineâ marginali anticè rectâ; valvâ dorsali majori, posticè angulatâ, anticè rotundatâ; areâ cardinali magnâ, trigonali, planulatâ; foramine magno, haud integro; valvâ ventrali semicirculari, cardine posticè lineari, transverso, recto; ossiculo interno costis tribus radiantibus, elevatis, versùs cardinem truncatis, dentibus cardinalibus duobus ad utrumque latus uno; margine valvarum incrassato.

Shell transverse, rounded in front, angular behind, thick, brownish, valves very unequal, radiately ribbed, smooth, ribs obtuse, few in number; marginal line straight in front; dorsal valve large, angular behind, rounded in front; cardinal area large, triangular, flattened, with a large incomplete perforation; ventral valve semicircular, hinge line linear, transverse and straight behind; the internal appendages consist of three radiating elevated ribs, truncated toward the hinge; cardinal teeth one on each side; margin of the valves thickened.

From the Coral fisheries in the Mediterranean: common.

26. *TEREBRATULA CUNEATA* (pl. lxxi. f. 83. 84.) *Risso.*

Testâ minimâ, transversâ, anticè rotundatâ, posticè angulatâ, subtruncatâ, albicante, valvis valdè inæqualibus, subrugosis, radiatim costatis, interstitiis costarum roseis, costis obtusis, perpaucis; lineâ marginali rectiusculâ; valvâ dorsali posticè obtusâ, foramine

maximo incompleto ; areâ cardinali magnâ, planulatâ ; valvâ ventrali depressâ, latè suborbiculari, margine postico recto, medianè emarginato ; ossiculo interno e costâ unicâ constante ; margine valvarum crenato.

Shell very small, tranverse, rounded in front, rather angular and truncated behind, whitish, valves very unequal, rather rough, radiately ribbed, ribs very few, obtuse, their interstices rose-coloured ; marginal line nearly straight ; dorsal valve obtuse, with a very large incomplete perforation ; cardinal area large, flattened ; ventral valve depressed, broadly suborbicular, its posterior margin straight, notched in the middle ; the internal appendage consists of a single rib ; the margin of the valves is crenated.

Found on the coast of Sicily and at Nice. In Mr. Cuming's Collection.

26. *TEREBRATULA LUNIFERA* (pl. lxxi. f. 85. 86.) *Phil.*

Testâ minimâ, subcordatâ, depressâ, punctatâ, (*punctis magnis*) hyalinâ, albicante, valvis subæqualibus, lævibus, politis, anticè emarginatis ; areâ cardinali parvâ, foramine magno, trigonali, incompleto ; ossiculo interno e costâ unicâ, elevatâ constante ; margine valvarum subcrenato.

Shell very small, somewhat cordiform, depressed, dotted, (with unusually large dots,) hyaline, whitish ; valves nearly equal, smooth, polished, notched in front ; cardinal area small, with a large incomplete triangular perforation ; internal appendage consisting of a single elevated rib ; margin of the valves slightly crenated.

We do not find in this species the sort of internal appendage described by Philippi. In Mr. Cuming's specimens it is nearly similar to that of *T. cuneata*, though the shells are in other respects very different. From the coast of Sicily.

27. *TEREBRATULA SEMINULUM* (pl. lxxi. f. 87. 88.) *Phil.*

Testâ subtransversâ, suborbiculari, compressâ, posticè acuminatâ, anticè emarginatâ, fulvescente ; valvis inæqualibus, radiatim costatis, costis perpaucis, rotundatis, subobsoletis ; valvâ dorsali posticè acuminatâ, foramine magno, incompleto, trigonali, areâ cardinali mediocri, planulatâ, deltidiis parvis angustis ; valvâ ventrali transversâ, lineâ cardinali rectâ ; ossiculo interno e costâ elevatâ submedianâ unicâ constante ; margine interno valvarum incrassato, granoso.

Shell somewhat transversely suborbicular, compressed, acuminate posteriorly, emarginated in front and of a pale fulvous colour, valves unequal, with very few radiating ribs, which are

rounded and nearly obsolete; dorsal valve acuminate behind, with a large incomplete triangular perforation; cardinal area of moderate size, flattened, with small, narrow deltidia; ventral valve transverse, with a straight hinge line; internal appendage consisting of a single elevated central ridge; inner margin of the valves thickened and granulous.

From deep water at Drepani; in Mr. Cuming's Collection.

28. *TEREBRATULA SANGUINEA* (pl. lxxi. f. 71-73.) *nobis*. *Anomia sanguinea*, *Chemn.* *T. erythroleuca Quoy*.

Testâ suborbiculari, anticè submarginatâ, gibbosiusculâ, tenui, sanguineâ, radiis maculisque radiantibus albidis ornatâ; lineâ marginali rectâ, anticè subsinuatâ; valvâ dorsali posticè subacuminatâ, truncatâ, foramine mediocri, integro, areâ cardinali latiusculâ, marginibus subacutis, deltidiis majusculis, coalescentibus; valvâ ventrali depressiusculâ, transversim obovatâ, anticè subsinuatâ, ossiculo interno primùm format radios duos, deinde annulum centralem et amenta dua lateralia, demùm amentum superum reflexum annulo centrali adjunctum; margine valvarum integro.

Shell suborbicular, slightly notched in front, rather gibbous, thin, of a bright light red colour with white rays and radiating spots; marginal line straight, slightly sinuated in front; dorsal valve rather acuminate behind and truncate; perforation middle-sized, complete; cardinal area rather broad, with sharpish edges; deltidia rather large and united; ventral valve somewhat depressed, transversely obovate, slightly sinuated in front; the internal appendage at first forms two rays, then a central ring and two lateral loops, and at length a reflected dorsal loop united to the central ring; margin of the valves entire.

From the Island of Zebu, attached to Coral under stones; H. Cuming.

29. *TEREBRATULA ROSEA* (pl. lxxi. f. 74-77.) *Humphrey*.

Testâ oblongo-ovali, subdepressâ, posticè subattenuatâ, crassâ, roseâ, albicante, radiatim pictâ; valvis subæqualibus, lævibus; lineâ marginali subflexuosâ, anticè reflexâ; valvâ dorsali majori, posticè subproductâ, truncatâ, foramine minimo, integro; areâ cardinali latiusculâ, cum deltidiis coalescentibus, sulco mediano discretis; valvâ ventrali ovali, anticè paululùm rotundato-attenuatâ; lineâ marginali ex umbone ad utrumque latus declivi, ossiculo interno costâ elevatâ, porrectâ, simplici constante; margine valvarum integro.



Shell of an oblong oval form, rather depressed, slightly attenuated behind, thick, rose-red, painted with paler radiating marks; valves nearly equal, smooth; marginal line somewhat flexuous reflected in front; dorsal valve the larger, rather produced posteriorly, and truncated; perforation very small, entire; cardinal area rather wide, with united deltidia, marked by a mesial groove; ventral valve ovate, anteriorly slightly attenuated and rounded; its marginal line slanting downward from the apex on each side; internal appendage consisting of a single elevated rib, standing out; margin of the valves entire.

From Brazil, according to the late G. Humphrey. The pale variety, f. 77, is from a specimen in Mr. Cuming's Collection.

30. *TEREBRATULA CANCELLATA* (pl. lxxi. f. 93-95.) *Koch*, vide *Küster* vii. i. t. 2. b. f. 11-13.

Testâ ovato-oblongâ, ventricosâ, fuscescente; valvis valdè inæqualibus, radiatim striatis, striis tenuibus confertissimis, lineis incrementi creberrimè decussatis; valvâ dorsali oblongâ, posticè subacuminatâ, truncatâ; foramine magno, circulari, integro; areâ cardinali rotundatâ, deltidiis majusculis, obsoletè sulcatis, in medio coalescentibus; valvâ ventrali subovatâ, lateribus posticis anticè declivibus; lineâ marginali flexuosâ, margine valvarum exilissimè crenulato.

Shell ovate-oblong, ventricose, brownish; valves very unequal, radiately striated; striæ very slender, close-set, and very finely decussated by the lines of growth; dorsal valve oblong, acuminate behind, and truncated; perforation large, circular, entire; cardinal area rounded, with rather large, obsoletely grooved deltidia, united in the middle; ventral valve subovate, with the posterior sides inclining forward; marginal line flexuous; edge of the valves very delicately crenulated.

In Mr. Cuming's Collection.

31. *TEREBRATULA CRENULATA* (pl. lxxi. f. 96-98.) *nobis*.

Testâ suborbiculari, posticè subacuminatâ, subtruncatâ, crassiusculâ, albicante, valvis inæqualibus, radiatim costatis, costis paucis, majusculis, rotundatis; lineâ marginali flexuosâ, anticè subsinuatâ; foramine magno, subintegro; areâ cardinali magnâ, subplanulatâ, margine undulato; deltidiis magnis, discretis; valvæ ventralis margine postico ad utrumque latus declivi; ossiculo interno e spinâ validâ obtusâ, anticè porrectâ, ramulis duobus lateralibus retroversis; margine valvarum crenato.

Shell suborbicular, rather attenuated and subtruncate behind, rather thick and whitish; valves unequal, with few rather large, rounded, radiating ribs; marginal line flexuous, slightly sinuated in front; perforation large, nearly entire; cardinal area large, flattish, with an undulated margin; deltidia large, separate; posterior margin of the ventral valve inclined on either side; internal appendage consisting of a single strong spine standing forward and with two lateral reflected branches; margin of the valves crenated.

From Santa Cruz; in Mr. Cuming's Collection.

32. *TEREBRATULA GLOBOSA* (pl. lxxi. f. 99-101.) *Lam.*

Testâ ovată, ventricosă, glaberrimă, albicante; valvis subæqualibus, anticè subtrilobis; lineâ marginali rectă, anticè subsinuată; valvâ dorsali posticè subacuminată, vertice subreflexo, truncato; foramine magno, obliquo, fere integro; areâ cardinali majusculă, lateribus rotundatis; deltidiis majusculis, trigonalibus, discretis; carinâ dorsali lată, rotundată, subinconspicuă; valvâ ventrali rotundată, anticè sublobată; ossiculo interno magno,  $\frac{2}{3}$  longitudinis testæ, ut in *T. Californicâ*, margine valvarum integro.

Shell ovate, ventricose, very smooth, whitish; valves nearly equal, very slightly trilobed in front, marginal line straight, sinuated in front; dorsal valve slightly acuminate behind, its vertex subreflected and truncated; perforation large, oblique, nearly complete; cardinal area large, rounded on the sides, deltidia large, triangular, separate; mesial ridge broad, rounded, not very distinct; ventral valve rounded, slightly lobed in front; internal appendage large,  $\frac{2}{3}$ ds the length of the valve and formed as in *T. Californica*; margin of the valves entire.

I have only seen a single specimen of this species, which is in Mr. Cuming's Collection without locality: it agrees perfectly with the representation in the Enc. Méth. t. 239. f. 2. still the foramen is not quite complete, although Lamarck gives "foramine integro" as one of its characters.

33. *TEREBRATULA INCONSPICUA* (pl. lxxi. f. 102-104.) *nobis.*

Testâ rotundato-subtrigonală, posticè acuminato-rotundată, anticè subsinuată, obscurè rufă; valvis inæqualibus, glabris; lineâ marginali flexuosă; valvâ dorsali rotundato-subtrigonală, foramine maximo, incompleto; areâ cardinali lată, ad utrumque latus declivi; deltidiis mediocribus, latè discretis; valvâ ventrali transversim oblongă, subplanulată, sulco mediano lato, subinconspicuo; margine valvarum integro.

Shell rounded, subtrigonal, acuminate and rounded behind, slightly sinuated before, dull red; valves unequal, smooth; marginal line flexuous; perforation large, incomplete, cardinal area broad, inclining on each side, deltidia of moderate size, widely separated; ventral valve transversely oblong, somewhat flattened, with a broad, rather indistinct mesial groove; margin of the valves entire.

From the late G. Humphrey's Collection; locality unknown.

34. *TEREBRATULA PULCHELLA* (pl. lxxi. f. 105-107.) *nobis*.

Testâ subovatâ, posticè acuminato-rotundatâ, lævi, albidâ, lineis nonnullis radiantibus rufis; valvis inæqualibus; lineâ marginali subflexuosâ; valvâ dorsali subplanulatâ, posticè acuminatâ, anticè rotundatâ, foramine magno, incompleto; areâ cardinali inconspicuâ, lateribus rotundatis; deltidiis parvis, discretis; valvâ ventrali subcirculari, planulatâ; ossiculo interno e gnomone porrecto, anticè posito constante; margine valvarum integro.

Shell subovate, acuminate and rounded behind, smooth, whitish with a few radiating red lines; valves unequal, marginal line somewhat flexuous; dorsal valve rather flattened, acuminate posteriorly, rounded in front; perforation large, incomplete; cardinal area indistinct, its sides rounded; deltidia small, separate; ventral valve somewhat circular, flattened; internal appendage consisting of a single prominent gnomon near the front; margin of the valves entire.

Found by Mr. Cuming attached to Corals at Calapan, Isle of Mindoro. Also from the Island of Cocos, Lieut. Swainson; in the late G. Humphrey's Collection.

35. *TEREBRATULA LENTICULARIS* (pl. lxxii. f. 108-110.) *Desh.* Mag. de Zool. 1841 pl. 41.

Testâ orbiculari, lentiformi, lævigatâ, rubrâ; valvis subinæqualibus, lineâ marginali ex umbone ascendente, deinde rectiusculâ, anticè obsoletissimè subsinuatâ; valvâ dorsali posticè subacuminatâ, recurvâ, foramine parvo, integro; areâ cardinali planulatâ, lateraliter angulatâ; deltidiis majusculis, planis, coalescentibus; valvâ ventrali circulari; ossiculo interno e costâ unicâ medianâ  $\frac{1}{3}$  longitudinis testæ, et ramulis duobus ex umbone constante; margine valvarum integro.

Shell orbicular, lentiform, smooth, dark red; valves somewhat unequal; marginal line ascending from the umbo, then nearly straight; and very slightly sinuated in front; dorsal valve slightly acuminate posteriorly and recurved; perforation small, complete;

cardinal area flattened, angular on the sides; deltidia rather large, flat and united; ventral valve circular; the internal appendage consists of a single mesial rib one-third the length of the shell and two branches setting off from the umbones.

From the Straits of Fauveau, New Zealand. Kindly lent to us by M. Deshayes, who has stated that it not only differs from *T. Californica* in colour, but in the internal appendages. In the only specimen we have seen these appendages appear to us to be incomplete. A specimen of our *T. inconspicua* is attached to it near the apex.

36. *TEREBRATULA ZELANDICA* (pl. lxxii. f. 111–113.) *Desh.* Mag. de Zool. 1841 pl. 42.

Testâ subtransversâ, subrotundâ, subacuminatâ, ventricosâ, crassiusculâ, rubrâ, valvis inæqualibus, radiatim costellatis, costellis dichotomis; lineâ marginali flexuosâ, anticè subsinuatâ; valvâ dorsali posticè subattenuatâ, reflexâ, rotundatâ; foramine magno, integro; areâ cardinali magnâ, rotundatâ; deltidiis majusculis, tetragonis, medianè coalescentibus, sulco centrali distincto; carinâ dorsali inconspicuâ, latâ, rotundatâ; valvâ ventrali transversim obovatâ, anticè subsinuatâ; marginibus posticis declivibus; ossiculo interno prope cardinem e ramulis duobus divaricatis, costâ centrali posticâ constante; marginibus valvarum crenulatis.

Shell subtransverse, nearly orbicular, slightly acuminate, ventricose, rather thick, red; valves unequal, radiately costellated, the little numerous ridges dichotomous; marginal line flexuous, somewhat sinuated anteriorly; dorsal valve slightly attenuated behind and reflected, and rounded; perforation large, complete, cardinal area large, rounded; deltidia rather large, trapezoidal, united in the centre, with a distinct central groove; mesial ridge broad, rounded and rather indistinct; ventral valve transversely obovate, slightly sinuated in front; posterior margins inclined downwards; internal appendage close to the hinge consisting of two divaricating branches and a central posterior ridge; margin of the valves crenulated.

‡ From New Zealand; the specimen from which our figure is taken was kindly lent to me by Madame Dupont.

37. *TEREBRATULA TRANSVERSA* (pl. lxxii. f. 114, 115.) *nobis.*

Testâ transversim subovatâ, tenui, rudi, glabrâ, pallescente; lineâ marginali subflexuosâ, anticè subsinuatâ; valvâ dorsali ovato-subtetragonâ, reflexâ, posticè obtusissimè angulatâ; foramine maximo, incompleto; areâ cardinali magnâ, planatâ; deltidiis



parvis, longè discretis ; carinâ dorsali inconspicuâ, rotundatâ ; valvâ ventrali transversim oblongâ, anticè rotundatâ, posticè in angulo obtusissimo desinente ; sulco mediano subinconspicuo, rotundato ; margine valvarum integro.

Shell transversely subovate, thin, rugose, smooth, of a pale colour ; marginal line somewhat flexuous, slightly sinuated in front, dorsal valve of a somewhat tetragonal ovate form, very obtusely angular behind and reflected ; perforation very large, incomplete ; cardinal area large and flattened, deltidia small, very distant ; mesial ridge rounded, indistinct, ventral valve transversely oblong, rounded in front, and finishing in a very obtuse angle behind ; mesial groove rounded, indistinct ; margin of the valves entire.

In Mr. Norris's Collection, and in that of M. Janelle.

38. *TEREBRATULA LABRADORENSIS* (pl. lxxi. f. 89, 90.) *nobis*.

Testâ suborbiculari, posticè acuminatâ, obtusâ, crassiusculâ, albidâ, valvis valdè inæqualibus, radiatim obsoletè costatis ; lineâ marginali subflexuosâ ; valvâ dorsali anticè rotundatâ, posticè acuminatâ, obtusâ ; foramine magno, integro ; arcâ cardinali magnâ, subplanulatâ ; deltidiis majusculis, coalescentibus ; carinâ dorsali inconspicuâ ; valvâ ventrali suborbiculari, posticè subacuminatâ, margine valvarum crenulato.

Shell suborbicular, acuminate behind, obtuse, thickish, whitish ; valves very unequal, obtusely radiately ribbed ; marginal line somewhat flexuous ; dorsal valve rounded in front, acuminate and obtuse behind ; perforation large, entire ; cardinal area large, somewhat flattened ; deltidia rather large, united ; mesial ridge indistinct ; ventral valve nearly orbicular, slightly acuminate behind ; margin of the valves crenulated.

In the British Museum, from Labrador ; C. Goodsir.

39. *TEREBRATULA ALGOENSIS* (pl. lxxi. f. 91, 92.) *nobis*.

Testâ suborbiculari, posticè subacuminatâ, anticè sublobatâ, albidâ ; valvis radiatim striatis, carinâ dorsali conspicuâ, rotundatâ ; foramine magno, incompleto ; margine valvæ dorsali minutissimè crenulato.

Shell suborbicular, slightly acuminate behind, rather lobed in front, whitish ; valves radiately striated ; mesial ridge distinct, roundish ; perforation large, incomplete ; margin of the dorsal valve very minutely crenulated.

A single valve of the species is in the British Museum, labelled "Algoa Bay ; Bowerbank."

40. Of the *TEREBRATULA ROTUNDATA*, *Lam.* Hist. nat. des Anim. sans vert. vi. pt. 1. p. 246. Encyl. méth. t. 239. f. 5., it is impossible for us to give any representation, as we have never seen the shell, and it is not to be found in the Collections of London or Paris: we almost suspect it to be a fossil and not a recent species: we earnestly entreat information upon this subject and upon the existence of M. Le Comte de la Touche's Collection, where it is cited by Lamarek.

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MONOGRAPHS OF THE GENERA

**ORBICULA, CRANIA, HIPPONYX**

AND

**THECIDIUM.**

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ORBICULA.

Testa suborbicularis, inæquivalvis, compressa, valvâ superiore depresso-conicâ, vertice subcentrali; valvâ inferiore extûs disco parvo, postico, pediculi adhæsione, processu obtusiusculo intus terminato; cardine ligamentoque cardinis nullis.

A nearly orbicular, rather irregular, inequivalve, compressed bivalve, affixed by a tendinous pedicle, which spreads over a small disk placed near the posterior part of the lower valve externally; in the middle of this disk is a fissure, which divides it longitudinally, which opens into the valve and is terminated anteriorly by an obtuse process; the upper valve is of a flattened conical form with a nearly central vertex. The Orbiculæ consist almost entirely of a horny substance, with very little, if any, testaceous matter.

1. ORBICULA LAMELLOSA (pl. lxxiii. f. 1.) *Brod. Zool. Proc.* 1833. p. 124.

Testâ corneâ, fuscâ, suborbiculari, subdepressâ, lamellis concentricis, elevatis, rugosâ.

Shell of a horny substance, chesnut brown, nearly orbicular, rather depressed, covered with elevated concentric lamellæ; disk of adhesion oblong, close to the posterior edge, perforation oblong, placed near the hinder part of the disk.

Found in groups on various parts of the coasts of Peru, H. Cuming.

2. ORBICULA LÆVIS (pl. lxxiii. f. 2, 3.) *Sow. Trans. Linn. Soc.* vol. xiii.

Testâ lævi, tenuiusculâ, apice ex margine remoto.

Shell smooth, rather thin; apex distant from the margin; disk of adhesion oblong, not close to the posterior margin; perforation short, near the hinder edge of the disk of adhesion.



Found by Mr. Cuming attached to Mytili, at a depth of six fathoms, off Conception, Chili.

3. *ORBICULA TENUIS* (pl. lxxiii. f. 4, 5.) *nobis*.

Testâ lævi, tenui, apice ad marginem propinquo.

Shell smooth, thin, apex of the upper valve near the posterior margin; disk of adhesion obtusely triangular, close to the hinder edge; perforation linear.

4. *ORBICULA CUMINGII* (pl. lxxiii. f. 6.) *Brod. Zool. Proc.* 1833. p. 124.

Testâ subconicâ, suborbiculari, crassiusculâ, striis ab apice radiantibus numerosis, lineis incrementi elevatis decussantibus, epidermide pallidè fuscâ.

Shell nearly orbicular, subconical, rather thick, with numerous striæ radiating from the subcentral apex, and decussated by the elevated lines of growth; epidermis of a pale brown colour.

Found by H. Cuming, at Payta, St. Elena and Panama.

5. *ORBICULA STRIGATA* (pl. lxxiii. f. 7.) *Brod. Zool. Trans.* vol. i. pt. 2. pl. xxiii. f. 1.

Testâ crassiusculâ, subrotundâ, substriatâ, radiatim castaneo-strigatâ; epidermide tenui fuscâ.

Shell rather thick, nearly orbicular, slightly striated, radiately streaked with chesnut colour, epidermis thin, pale brown.

Island of Cana, Guatemala, Malacca, and Corrigedor; H. Cuming.

6. *ORBICULA STRIATA* (pl. lxxiii. f. 8.) *Sow. Trans. of Linn. Soc.* vol. xiii.

Testæ valvulâ superiore striis elevatis plurimis, ex vertice ad marginem decurrentibus.

Shell rather irregularly orbicular, thickish, apex nearly central; upper valve with numerous elevated striæ from the apex to the margin.

This is the species which Lamarck has elevated to the rank of a genus (named *Discina*), from not rightly knowing his own previously established genus *Orbicula*.

Locality unknown; found in ballast used to mend roads near London.

## CRANIA.

Testa inæquivalvis, æquilatera, (subirregularis) rotundato-sub-

quadrata, valvâ superiore depresso-conicâ, vertice subcentrali, inferiore planulatâ extus adhærente; cardine et ligamento cardinali nullis.

Shell of two unequal valves which are equilateral, and of a rounded subquadrate form, though rather irregular on account of its being fixed to rocks, stones, shells, corals, &c.; upper valve of a flattened conical form, with the vertex near the centre; lower valve flattened, adhering by its external surface. Hinge and cardinal ligament none. Muscular impressions in each valve four, of which in the attached valve two are near the centre and approximated (sometimes united), and two are near the posterior margin and distant. In some species there is a prominence just behind the central pair which bears a slight resemblance to a nose, so the shell resembles a front face, whence its name, the posterior muscular impressions being compared to eyes, and the two anterior, when united, resembling the mouth.

*Crania* is distinguished from *Orbicula* by its mode of attachment; and from *Hipponyx* by its muscular impressions. These are the only three genera known which are destitute of hinge, and hinge ligament.

CRANIA PERSONATA (pl. lxxiii. f. 9.) *Lam. Hœninghaus monogr.* p. 2. f. 1. a, b.

Testæ valvâ inferiore ovato-orbiculari, posticè retusâ; cicatricibus posterioribus obliquis subreniformibus, anterioribus in unam orbicularem confluentibus, tuberculosi; rostello nullo, disco palmato-radiato, limbo anticè incrassato, granuloso.

Lower attached valve of a rounded ovate form, truncated posteriorly; the posterior muscular impressions are somewhat reniform and the anterior are united together forming one orbicular tuberculated impression, without any rostellum; disk with a radiated palmate impression; anterior margin thickened, granular.

India; Retz, Hœninghaus.

We have never met with this species, and have therefore copied the description from Hœninghaus' *Beitrag zur Monographie der Gattung Crania* (1828); and have to acknowledge our obligation to that gentleman for the drawing which he was so kind as to communicate.

2. CRANIA RINGENS (pl. lxxiii. f. 10, 11.) *Hœning. l. c. p. 3.* f. 2. a, b.

Testæ valvâ inferiore suborbiculari, posticè retusâ, impressi-

onibus posterioribus transversis, anterioribus in unam transversalem confluentibus, rostello parvo, disco pedato, limbo antico incrassato; valvâ superiore subtrapezoidali, cicatricibus posterioribus magnis limbo interno incrassato, elevato, margine tenui; extus lævi, brunneâ.

Found upon corals in the Mediterranean. The upper valve, which is very rarely seen in England, is rather smaller than the attached valve, its posterior muscular impressions are large and prominent, and its outer edge is very thin. This species is but slightly distinguishable from *C. personata*.

3. CRANIA NORVEGICA (pl. lxxiii. f. 15, 16, 17.) *nobis*.  
*Patella anomala*, Müll. Zool. Dan. *Patella distorta*, Montagu Test. Brit.

Testæ valvâ inferiore transversim rotundato-subtetragonâ, posticè retusâ; cicatricibus posticis magnis ovatis, anticè subangularibus, anticis discretis, ovatis, in centrum ferè coalescentibus; rostello obtuso; disco palmato-radiato; limbo antico incrassato, granulato; valvâ superiore tenuiore, rugulosâ, subtrapezoidali, brunneâ, cicatricibus posterioribus magnis, limbo interno incrassato, margine tenui.

There is little to distinguish this from *C. personata* and *C. ringens*, except the separation of the anterior muscular impressions in the attached valve, by the interposition of what Høeninghaus calls a *rostellum* "like a nose between the mouth and the eyes"; in the present species, however, the upper valve is exactly of the same dimensions as the lower.

Coasts of Ireland and Scotland, abundant in some localities.

4. CRANIA ROSTRATA (pl. lxxiii. f. 12, 13, 14.) *Høening. l. c.*  
*p. 3. f. 3. a, b.*

Testæ valvâ inferiore rotundato-subtrapezoidali, margine postico rectiusculo, cicatricibus posticis orbicularibus; anticis parvis, semilunaribus, anticè coalescentibus, rostello parvo, acutiusculo; disco sinuato, limbo granifero, anticè irregulari, incrassato; valvâ superiore tenuiore, albâ, subradiatim rugosâ, intus costellis duabus elevatis, radiantibus, ex centro versus marginem posticum decurrentibus.

Inferior or attached valve of a rounded, somewhat trapezoidal form, its posterior margin nearly straight, posterior muscular impression orbicular; anterior small, somewhat lunulate, united anteriorly; rostellum small, rather sharp; disk with palmated and digitated impressions; border granulose, irregular and thick-

ened in front; upper valve thinner, white, somewhat radiately rugose, internally with two elevated ridges diverging from the centre towards the posterior lateral margin; umbo somewhat posterior.

From the Mediterranean. In Mr. Cuming's collection.

### HIPPONYX.

Testa inæquivalvis, subæquilatera, valvâ inferiore affixâ, compressâ, margine plerumque elevato; valvâ superiore subconicâ, vertice ad marginem posticum inclinato; impressionibus muscularibus in utrâque valvâ duabus, posticè coalescentibus, formam ferri equini conjunctis exhibentibus; cardine et ligamento cardinis nullis.

Shell inequivalve, nearly equilateral, attached by the lower valve, which is compressed and its margin generally thickened; upper valve somewhat conical, rather inclined toward the posterior margin, muscular impressions two in each valve, when taken together somewhat in shape like a horse-shoe, those of the upper confluent posteriorly.

Distinguished and proved to be a bivalve by DeFrance, who first met with the two valves together in a fossil species. The species have usually been called *Patellæ*, because the upper valve alone was known. Very rarely the two valves have been met with together. Several species in this complete state have been discovered and brought to this country by Mr. Cuming, from whose Collection our drawings have been taken.

1. HIPPONYX BARBATA (pl. lxxiii. f. 26, 27.) *Sow. Zool. Proc.* 1835. p. 5.

Testâ pallidè fulvâ, subelevato-conicâ, radiatim confertim striatâ; margine ventrali producto; epidermide pilosâ, margine interno crenulato.

Shell pale yellowish brown, of a slightly elevated conical form, covered with radiated close-set striæ; ventral margin produced; inner edge crenulated; epidermis coarsely hairy.

Found on the Coral reefs around Toobouai, one of the Society Islands, by Mr. Cuming.

2. HIPPONYX MITRULA (pl. lxxiii. f. 18, 19, 20.) *DeFr. l. c.* *Pileopsis mitrula*, *Lam.* *Patella mitrula*, *Auctm.*

Testâ albâ, depresso-conicâ, concentricè lamellosâ, lamellis subconfertis, radiatim striatis; epidermide pilosâ.



Shell white, of a depressed conical form, concentrically lamellar, and radiately striated; lamellæ close-set; epidermis hairy.

Found by Mr. Cuming upon stones among coarse sand in seventeen fathoms water, near Lobos Island, on the coast of Peru.

3. *HIPPONYX SUBRUFUS* (pl. lxxiii. f. 21, 22, 23.) *Sow. l. c.*  
*Pileopsis subrufus, Lam. Patella subrufa, Dillw.*

Testâ aurantiaco-rufescente, subconicâ, concentricè sulcatâ, radiatim striatâ, striis profundis, marginibus sulcorum crenulatis; vertice posticè inclinato.

Shell somewhat conical, of an orange reddish colour; concentrically grooved and radiately striated, with deep striæ; margin of the grooves crenulated; vertex inclined backwards.

Found with *H. Mitrula*, by Mr. Cuming.

4. *HIPPONYX RADIATA* (pl. lxxiii. f. 24, 25.) *Gray, l. c.*

Testâ subdepresso-conicâ, fulvescente, radiatim costatâ, costis crebris, imbricato-squamosis; vertice postico.

Shell of a somewhat depressed conical form, and of a yellowish brown colour, radiately ribbed, ribs very close and fine, with little imbricated scales; vertex posterior.

Found attached to rocks at Panama and the Gallapagos Islands, by Mr. Cuming.

5. *HIPPONYX TICAONICA* (pl. lxxiii. f. 28, 29.) *nobis.*

Testâ suborbiculari, radiatim confertim striatâ, albidâ; vertice versus marginem postico-dextrum reflexo; epidermide pilosâ, fulvescente.

Shell suborbicular, with close-set radiating striæ, whitish; vertex turned backward toward the right margin; epidermis hairy, pale fulvous.

From Ticao; H. Cuming.

#### THECIDIUM, *De France.*

Testa inæquivalvis, æquilatera, valvâ alterâ gibbosâ, sæpe rostratâ, imperforatâ, extûs affixâ, alterâ planâ operculiformi; cardine ut in *Terebratulis*; ossiculo interno in valvâ planâ intus affixo; arcâ cardinali magnâ, trigonâ.

The principal circumstance which distinguishes this genus from *Terebratula* is, that there is no perforation at the apex of the deeper valve. It is found adhering to the Red Coral, in the Mediterranean.

THECIDIUM MEDITERRANEUM (pl. lxxiii. f. 30, 31, 32.) *Risso*.

Testæ valvâ dorsali gibbosâ, posticè rostratâ, anticè subbilobatâ; valvâ ventrali planulatâ, operculiformi; intûs lamellis ad utrumque latus lobulos duos, alterum semilunatum, magnum, alterum parvum internum efformante.

Shell with the dorsal valve gibbous, produced behind, and somewhat bilobate in front; ventral valve flattened, operculiform; internal appendage lamellar, forming two lobes on each side, one of which is large and semilunate, and the other very small; they adhere throughout to the inside of the ventral valve.

Found on Corals in the Mediterranean.

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## ORBICULA, CRANIA, HIPPONYX, AND THECIDIUM.

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### LIST OF FIGURES IN PLATE LXXIII.

- Fig. 1. *Orbicula lamellosa*, 1.  
 2, 3. — *lævis*, 2.  
 4, 5. — *tenuis*, 3.  
 6. — *Cumingii*, 4.  
 7. — *strigata*, 5.  
 8. — *striata*, 6.  
 9. *Crania personata*, 1.  
 10, 11. — *ringens*, 2.  
 12, 13, 14. — *rostrata*, 4.  
 15, 16, 17. — *Norvegica*, 3.  
 18, 19, 20. *Hipponyx Mitrula*, 2.  
 21, 22, 23. — *subrufa*, 3.  
 24, 25. — *radiata*, 4.  
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 28, 29. — *Ticaonica*, 5.  
 30, 31, 32. *Thecidium Mediterraneum*.



## MONOGRAPH OF THE GENUS

## MARGINELLA.

BY G. B. SOWERBY, JUN. F.L.S.

*Char. Gen.* Testa subovata, nitida; spirâ brevi, obtusâ, nonnunquam occultâ. Apertura elongata, anticè plerumque emarginata; columellâ nonnunquam callosâ, plicatâ; labio externo reflexo, plerumque incrassato; operculum nullum.

Shell oval, smooth. Spire short, obtuse, sometimes hidden by the deposition of enamel, or included in the last whorl. Aperture long, generally emarginated at the anterior extremity; columellar lip sometimes thickened at both extremities, with folds increasing in obliquity and length towards the anterior termination, but not so much so as in *Voluta*; outer lip reflected and generally thickened so as to form a varix; no operculum; no epidermis.

The shell being almost enveloped by the mantle, has a brilliancy of polish equal to the *Cowries*. This, and the reflected edge of the outer lip, sufficiently distinguish all the species from the genus *Voluta*.

1. MARGINELLA FABA (pl. lxxiv. f. 1, 2.), *Linn. Syst. Nat. M. bifasciata* var., *Lam. Anim. s. vert. vii. p. 357*.

M. ovatâ, griseo-fulvâ, punctorum magnorum seriebus irregularibus 7 ad 9 sparsim cinctâ; spirâ prominulâ; anfractibus vix angulatis, ad angulum crenulatis; columellâ quadriplicatâ, labio externo crasso, paululùm arcuato, plerumque minutè subcrenulato, posticè subemarginato, anticè attenuato, emarginato.

Oval, greyish buff, with 7 to 9 rows of distant large spots; spire rather prominent; whorls very slightly angulated, crenulated; columella with four folds; outer lip slightly bowed, very lightly and minutely crenulated, emarginated at the base.

There is no doubt of this being the true *Voluta Faba* of Linnæus; from Senegal.



2. *MARGINELLA HARPÆFORMIS* (pl. lxxiv. f. 7, 8.), *Beck. M.S.*

*M. angulatâ*, pallidissimè roseâ, griseo obscure fasciatâ, punctis minutis, creberrimis, seriatim ornatâ; spirâ subelongatâ; anfractibus angulatis, crenulatis; columellâ quadriplicatâ; labio externo crasso, validè crenulato, anticè emarginato.

It is difficult to describe with precision the difference between this species and *M. bifasciata*; it is however thicker and more angular, and the aperture is shorter. From Senegal.

3. *MARGINELLA BIFASCIATA* (pl. lxxiv. f. 13, 14, 15.) *Lam. Anim. s. vert. vii.*, p. 557.

*M. ovali*, pallidè fulvâ, griseo nebulatâ vel undulatâ, fasciis duabus nigrescentibus cinctâ, seriatim creberrimè punctatâ; spirâ brevi, crenulatâ, vix angulatâ, obtusâ; columellâ obliquè quadriplicatâ; labio externo subelongato, arcuato, validè crenulato, anticè emarginato.

More rounded, with the spire shorter in proportion, and the outer lip more bowed outwards than the *M. Faba*; the spots are also much more numerous and minute: fig. 14, with the strong dark bands, is Lamarck's shell; fig. 15 is a very beautiful variety with the bands fainter, and with lightning-like markings between, from Mr. Cuming's Collection; in fig. 13 the bands are scarcely perceptible. From Senegal.

4. *MARGINELLA OBTUSA* (pl. lxxiv. f. 11, 12.) *nobis.*

*M. ovali*, crassâ, pallidè fulvâ, griseo nebulatâ, creberrimè seriatim punctatâ, fasciis duabus, interruptis, nigrescentibus, cinctâ; spirâ breviusculâ, obtusâ; anfractibus leviter angulatis; plicis obtusis, elongatis; aperturâ angustâ; columellâ quadriplicatâ, anticè acutâ; labio externo lævi, crasso, posticè elongato et angulato, anticè emarginato.

A remarkable shell in the collection of Miss Saul, differing from *M. bifasciata* and the rest of the group in being much thicker, with a shorter obtuse spire, with a thickened, smooth outer lip, which is angulated and lengthened towards the apex; there are a few obtuse ribs running nearly all the length of the body whorl. Locality unknown.

5. *MARGINELLA PSEUDO-FABA* (pl. lxxiv. f. 21, 22.), *nobis*, *Zool. Proc.* 1846. *M. Faba*, *Lam. Anim. s. vert. vii.*

*M. angulatâ*, anticè attenuatâ, sub-recurvâ, pallidè fulvâ, griseo nebulatâ, punctorum irregulorum seriebus 10 sparsim cinctâ, spirâ prominulâ; anfractibus angulatis, ad angulum validè crenu-

latis; columellâ quadriplicatâ; labio externo crenulato, crasso, paululùm arcuato, posticè angulato, anticè emarginato, attenuato.

Much more angular than the true *M. Faba*, and has the anterior part of the body whorl tapering and bent upwards. From Senegal.

6. MARGINELLA ADANSONI (pl. lxxiv. f. 3, 4, 5.), *Kiener*, Sp. gen. coq. Marginella, p. 5, *M. bifasciata*, (*Lam.*), *Sow.* Gen. of Sh.

*M. angulatâ*, posticè sub-attenuatâ, sub-recurvâ; griseâ, lineis nigris obliquè longitudinaliter fasciatâ; vel rubrâ, lineis fuscis, vel fasciis duabus interruptis, et liniis obliquis fuscis; spirâ prominulâ; anfractibus angulatis, ad angulum leviter crenulatis; columellâ quadriplicatâ, labio externo crasso, crenulato; posticè sub-angulato, anticè emarginato, attenuato.

Much like *M. pseudo-faba* in general form, but decidedly angular and more elongated; there are several varieties in colouring, but all have the undulated oblique lines.

Isle of Gorea, Senegal.

7. MARGINELLA SPLENDENS (pl. lxxiv. f. 23, 24.), *Reeve*, Zool. Proc. 1842, and *Conch. Syst.*

*M. ovali*, creberrimè plicatâ, pallidè roseâ, griseo vel rubro nebulatâ, maculis griseis vel roseis curvatis per seriebus tribus dispositis; spirâ productâ, anfractibus rotundatis; columellâ plicis quatuor sub-quadratis, ultimis duabus obliquis; labio externo anticè emarginato, intùs crenulato, extùs punctato.

Like *M. glabella* in general form, but finely ridged, and having three rows of curved spots on the back, besides the minute dots which cover the shell.

In Mr. Cumming's Collection; from Guinea.

8. MARGINELLA BELLII (pl. lxxiv. f. 28, 29.), *nobis*.

*M. angulatâ*, plicatâ, griseâ, fasciis duabus nigrescentibus cinctâ, lineis nigris elongatis, creberrimè undatâ; spirâ productâ; columellâ obliquè quadriplicatâ; labio externo crasso, intùs crenulato.

The plicæ or ribs are lengthened so as nearly to reach the anterior part of the whorl; the aperture is shorter in proportion to the spire, and the outer lip thicker, than in *M. Adansoni*; there are very minute waved lines all over the shell.

From Professor Bell's Collection; locality unknown.

9. MARGINELLA STRIATA (pl. lxxv. f. 81, 82.) *nobis*.

*M. parvâ*, ovali, albâ; anfractibus crenulatis; columellâ quadriplicatâ, labio externo crenulato.

A very minute white shell with crenulated whorls; from North America, in Professor Bell's Collection.

10. *MARGINELLA MUSCARIA* (pl. lxxv. f. 45, 46, 47.) *Lam.*  
*Anim. s. vert. vii. p. 359.*

*M. angulatum ovatâ, fulvâ, vel aurantiâ; spirâ validè productâ; anfractibus subangulatis, ultimo leviter crenulato, prope labrum tumido; columellâ albâ, expansâ, callosâ, plicis quatuor obliquis, quarum anticâ sub-retusâ; labio externo albo, posticè tumido, subemarginato, anticè attenuato, ponè rotundato, anticè varicem validam formante.*

This species is remarkable for a tumidity near the reflected lip on the back of the last whorl, and for the callosity of the columellar lip which is spread over the front.

From the West Indies.

11. *MARGINELLA FORMICULA* (pl. lxxv. f. 41, 42.), *Lam.*  
*Anim. s. vert. vii. p. 359.*

*M. angulatâ, pallidè fulvâ; spirâ productâ; anfractibus angulatis, crenulatis; aperturâ angustâ; columellâ subrectâ, plicis quatuor, quarum anticâ tenui, obliquâ; labio externo valido, posticè angulato, emarginato, in medio incurvo, anticè attenuato, validè emarginato, ponè validè reflexo, anticè ad basin varicis columellari juncto.*

Angular, of a dull brown colour; with the spire produced, the whorls angular, crenulated. Of the four folds in the columella the last is thin and oblique. The outer lip is thickened inwards, with a notch or slope near the posterior end. It is strongly reflected, and at the anterior runs into a strong spiral varix.

New Holland.

12. *MARGINELLA TRANSLUCIDA* (pl. lxxv. f. 62, 63.), *nobis.*

*M. sub-elongatâ, albâ, translucidâ; spirâ productâ; aperturâ elongatâ, columellâ quadriplicatâ, labio externo intus in medio incurvo, anticè reflexo, extus validè reflexo, anticè varicem validum formante.*

A small, elongated, white, thin shell, having the outer lip gracefully bent inwards in the centre, and having a varix at the lower part of the last whorl. Australia.

13. *MARGINELLA LIMBATA* (pl. lxxiv. f. 18, 19, 20.), *Lam.*  
*Anim. s. vert. vol. vii.*

*M. ovali, subventricosâ, lævi, pallidè fulvâ, lineis undulatis*

longitudinaliter ornatâ; spirâ brevi, anfractibus subrotundatis; columellâ callosâ, expansâ, quadriplicatâ; labio externo crasso, intus leviter crenulato, ad marginem externum lineatim nigro maculato.

Oval, rather ventricose, smooth, of a pale fawn colour, marked by distant undulating lines. The spire is short, the aperture large; the columellar lip thickened and spread over the front of the last whorl. The outer margin of the reflected lip is marked by groups of strong, blackish lines.

Common; from Gambia. The reversed specimen (f. 18), is from Mr. Cuming's collection.

14. *MARGINELLA HELMATINA* (pl. lxxv. f. 38, 39), *Rang*, *Guerin*, *Mag. de zool. Kiener*, *Sp. gen. coq. Marginella*, p. 10.

*M. ovali*, lævi, griseo maculatâ, fasciis tribus, nigrescentibus interruptis cinctâ; spirâ brevi, anfractibus paucis, rotundatis; aperturâ elongatâ; columellâ tenui, expansâ, quadriplicatâ; labio externo intus minutè crenulato; ponè marginem externum subcanalifero.

Much smaller and more ventricose than *M. limbata*, having the columellar lip thinly spread over a portion of the last whorl, and a very narrow groove behind the reflected lip. The colour is spotted grey. From the River Gambia.

15. *MARGINELLA CUMINGII* (pl. lxxiv. f. 33, 34, 35.), *Petit*, *Revue Zoologique*?

*M. ovali*, lævi, ventricosâ, griseâ, creberrimè seriatim punctatâ, maculis nigrescentibus trifasciatâ, spirâ brevi, obtusâ; aperturâ elongatâ, columellâ sub-callosâ, paululùm expansâ, quadriplicatâ; labio externo crasso, rotundato, intus regulariter crenulato, ponè margine acuto, validè canalifero.

Much more ventricose than *M. helmatina*, with the outer lip much thicker, the reflected margin sharper, and a deeper groove behind it. The variety having the very broad outer lip (fig. 33.) is in the collection of Mr. Gaskoin; the others are Mr. Cuming's. From Senegal.

16. *MARGINELLA PETITII* (pl. lxxiv. f. 31, 32.), *Guerin*, *Mag. de zool.*

*M. ovali*, lævi, ventricosâ, pallidâ, griseâ rubescente leviter fasciatim punctatâ; spirâ brevi, anfractibus paucis, rotundato-sub-



angulatis; aperturâ latâ; columellâ callosâ, expansâ; labio externo crasso intûs irregulariter crenulato, extûs margine rotundato, vix canalifero.

The spire is rather more produced than in *M. Cumingii*, the columella is tumid and spread over a large portion of the body whorl; the crenulations on the inner lip are irregular, and the outer margin is rounded instead of being short as in *M. Cumingii*.

17. *MARGINELLA GLABELLA* (pl. lxxv. f. 52, 53, 54.), *Linn. Syst. Nat.* ed. 12. p. 1189.

*M. ovali*, ventricosâ, lævi, rubrâ vel brunneâ, prope suturam præcipuè, maculis albis conspersâ; spirâ conicâ, obtusâ, anfractibus vix rotundato-angulatis; aperturâ pyriformi, columellâ validè quadriplicatâ, plicis obliquitate versûs basin crescentibus; labio externo crasso, intûs crenulato, posticè emarginato, tum in angulum incurvum producto, anticè leviter emarginato.

Oval, ventricose, smooth, of a red or dark brown colour, which is darkest near the suture, sprinkled with roundish white spots, those near the suture larger and irregular; the spire is conical, with the apex obtuse and the whorls slightly rounded; of the four folds on the columella, those nearest the anterior termination are the most oblique, the last nearly vertical; the outer lip is hollowed out near the suture and then bends forward into a sort of angle. From Senegal.

18. *MARGINELLA GOODALLII* (pl. lxxiv. f. 16, 17.), *Sow. Tank. Cat.*

*M. angulatum ventricosâ*, lævi, fulvo-rubescente, maculis albis, rotundatis, magnis conspersâ; spirâ conicâ, obtusâ, anfractibus rotundato-angulatis; columellâ quadriplicatâ, plicis tenuis; labio externo crasso, intûs crenulato, extûs validè reflexo.

Differing from *M. glabella*, in being of a more regular form, in having the outer lip more thickened and more straightly reflected, and in having the folds of the columella much thinner and in the large size of the white spots.

19. *MARGINELLA IRRORATA* (pl. lxxv. f. 43, 55.), *Menke, Voluta glabelloides, Humphreys, M.S.*

*M. ovali*, sub-angulatâ, pallidè fulvâ, in medio rubescente, punctis albis, confertis, angulatum lineatâ; spirâ productâ, anfractibus subangulatis; columellâ quadriplicatâ, labio externo crasso, intûs crenulato, margine leviter reflexo.

Less ventricose than *M. glabella* with the mouth shorter in proportion to the spire, and the outer margin of the reflected lip less distinct; the shell is beautifully marked by zig-zag lines of minute white spots.

Mr. Cuming's and other Cabinets; from Senegal.

20. *MARGINELLA FULMINATA* (pl. lxxviii. f. 173.) *Kiener*, Sp. gen. coq. viv. *Marginella*, p. 33. pl. xii. f. 1.

"*M. testâ* ovatâ, sub-globosâ, albidâ, maculis rufis, angulosis, longitudinaliter depositis ornatâ; spirâ conicâ, obtusâ; labro intus albo; varice extus lutescente; columellâ quadriplicatâ."

"Habite l'océan Atlantique austral, la baie de Bahia." -

Not having the shell, we copy the description and one of the figures.

21. *MARGINELLA AURANTIA* (pl. lxxv. f. 49, 50.), *Lam. Anim. s. vert.* vii. p. 358.

*M. ovali, lævi, rubrâ, albo maculatâ, columellâ quadriplicatâ, labio externo aurantiaco, intus crenulato, extus validè reflexo.*

The difference between this and *M. glabella* is more easily observed than described; it is however much less ventricose and the outer lip more nearly straight; there is also a peculiar bluntness about the anterior part of the shell; the white irregular markings are arranged in three interrupted bands across the body whorl.

Common. From the River Gambia.

22. *MARGINELLA NODATA* (pl. lxxiv. f. 30.), *Hinds*, Zool. Proc. 1844. March.

*M. testâ* elongatè ovatâ vel sub-fusiformi, luteo-olivaceâ lineis nigris subflexuosis longitrorsum ornatâ, punctis concoloribus conspersis; labio intus denticulato; columellâ quadriplicatâ."

"With the general aspect and character of *M. Cleryi*, but somewhat larger, more broadly shouldered, the longitudinal lines studded at intervals with dark spots, and which are somewhat regularly disposed in the transverse direction; and lastly the spire is less elongated and furnished with rather indistinct pliciform ribs."

In Capt. Belcher's Collection, from Cape Blanco, W. coast of Africa; found in sand at 12 to 15 fathoms.

23. *MARGINELLA MUSICA* (pl. lxxv. f. 36, 37.), *Hinds*, Zool. Proc. 1844, March.

"*M. testâ* ovatâ, cinereo-olivaceâ, lineis nigris transversim ornatâ;

spirâ retuso-conicâ ; labro paululùm incrassato, intùs lævi ; columellâ quadriplicatâ.”

A smooth shell of a conical form, banded with lines of dark colour, between which are undulated pale greyish markings.

In Capt. Belcher's and Mr. Cuming's Collection ; from Cape Blanco, west coast of Africa, in 12 to 15 fathoms.

24. *MARGINELLA BELCHERI* (pl. lxxiv. f. 25, 26, 27.), *Hinds*, Zool. Proc. 1844, March.

“*M. concinnè* ovatâ, albâ, lineis eleganter punctatis raris, frequentioribus, vel confertis transversim depositis, interdum albofasciatâ ; spirâ mediocri, conicâ ; labro incrassato, albo, prope medium sub-dilatato, intùs lævi ; columellâ quadriplicatâ.”

Thick, oval, slightly angulated, smooth, the columella with four folds, the outer lip thick, particularly in the centre ; the marking consists of bands remote, or close, or finely punctuated lines.

In Capt. Belcher's and Mr. Cuming's Collection ; from Cape Blanco, west coast of Africa ; taken in 12 to 15 fathoms.

25. *MARGINELLA CLERYII* (pl. lxxiv. f. 9, 10.), *Petit*. Guerin, Mag. de zool. 1836, pl. 78.

*M. sub-elongatâ*, pallidè fulvâ, griseo obscure trifasciatâ, lineis nigrescentibus undatis longitudinaliter strigatâ ; spirâ productâ, apicè obtusâ ; aperturâ breviusculâ, columellâ quadriplicatâ ; labio externo sub-crenulado, posticè sub-arcuato, in medio incrassato, anticè emarginato.

Rather elongated, smooth, with beautiful zebra-like longitudinal lines.

From Senegal.

26. *MARGINELLA HÆMATITA* (pl. lxxv. f. 60, 61.), *Kiener*. Sp. gen. coq. viv.

*M. parvâ*, nitidâ, ventricosâ, rubrâ ; spirâ productâ, apicè obtusâ ; anfractu ultimo posticè ventricosus ; labio externo intùs crenulato, extùs validè varicoso ; columellâ quadriplicatâ.

Small, smooth, red ; with a prominent, obtuse spire ; the last whorl swelled near the suture ; the columella has four folds, the outer lip is crenulated within and forms a strong varix on the outside.

In Mr. Cuming's Collection. From Porto Rico.

27. *MARGINELLA NUBECULA* (pl. lxxv. f. 51.), *Lam. Anim. s. vert. M. pyrum. Gronovius ? M. picta, Dillw. cat.*

*M. angulatâ*, conicâ, lævi, ventricosâ, maculis latis, griseis vel

roseis, nigro ponè marginatis ornatâ ; spirâ productâ, anfractibus angulatis ; apice obtuso ; aperturâ latâ ; columellâ quadriplicatâ ; labio externo lævi, posticè sub-emarginato, tum angulato, anticè vix emarginato, ponè leviter varicoso.

Conical, smooth, with broad patches of a greyish or rosy colour, edged by dark zigzag lines ; the whorls have an angle at some distance from the suture ; the outer lip is smooth, and its external margin is not very prominent.

From the east coast of Africa.

28. *MARGINELLA INTERMEDIA* (pl. lxxiv. f. 6. pl. lxxvi. f. 90.), *Sow. Jun. Zool. Proc.*, 1846. *M. nubecula*, var. *alba*, *Kiener* ?

*M. ovali*, subangulatâ, ventricosâ, obliquâ, albâ, lævi ; spirâ productâ ; anfractibus rotundato-angulatis ; columellâ quadripliatâ ; labio externo lævi, crassâ, latè reflexâ.

A more oblique and less conical shell than *M. nubeculata*, and the outer lip is more broadly and strongly reflected.

Mr. Sowerby's Collection.

29. *MARGINELLA MOSAICA* (pl. lxxv. f. 58, 59.), *nobis*.

*M. conicâ*, lævi, ventricosâ, maculis griseis subquadratis, angulatim ornatâ ; spirâ breviusculâ ; anfractibus angulatis ; aperturâ latâ ; columellâ quadriplicatâ, labio externo lævi, posticè emarginato, tum angulato, deinde prope angulum emarginato, in medio sub-incrassato, ponè vix varicoso.

This species has a much shorter spire than *M. nubeculata*, and the outer lip has a notch near the posterior angle.

30. *MARGINELLA ROSEA* (pl. lxxv. f. 56, 57.), *Lam. Anim. s. vert. v. vii.*

*M. ovali*, lævi, maculis roseis vel fulvis, nigro-marginatis ornatâ ; spirâ productâ, apice obtusâ, anfractibus sub-rotundatis, vel leviter angulatis ; aperturâ latâ ; columellâ quadriplicatâ ; labio externo lævi, posticè emarginato, tum angulato, deinde latè emarginato, ponè fasciatim maculato.

More oval than *M. nubeculata*, and much less angular ; the outer lip has a notch near the angle.

West Africa.

31. *MARGINELLA PIPERITA* (pl. lxxv. f. 40, 44.), *Hinds, Zool. Proc.* 1844.

"*M. testâ obovatâ, maculis parvis nigris et albidis, interdum longitudinaliter coalitis, confertim ornatâ ; spirâ retusâ, conicâ ;*



btusâ, anfractu ultimo rotundatè angulato; spirâ lineâ unicâ comitatâ; labro incrassato, extûs nigro maculato, intûs lævi; columellâ quadriplicatâ.

Differing more from *M. rosea*, in general appearance and colouring than in more tangible characteristics.

In Mr. Cuming's Collection; locality unknown.

32. *MARGINELLA ALBO-CINCTA* (pl. lxxv. f. 48.), *nobis*, Zool. Proc. 1846.

*M.* sub-conicâ, subangulatâ, lævi, spirâ productâ; anfractibus angulatis, ultimo fasciâ albâ prope angulum, et alterâ ad terminum anticum cinctâ, inter fascias fusco maculato et punctis nigris pictâ; columellâ quadriplicatâ.

Provisionally described from a young specimen in Mr. Cuming's Collection. When full grown it would probably resemble *M. nubeculata* in form.

33. *MARGINELLA FESTIVA* (pl. lxxv. f. 72, 73.), *Kiener*, Sp. gen. coq. viv.

*M.* parvâ, oblongâ, lævi, pallidè fulvâ, lineis tribus roseis cinctâ, inter lineas, fasciis fuscis angulatim fusco-marginatis ornatâ; spirâ conicâ, productâ; columellâ anticè sub-incrassatâ, quadriplicatâ; labio externo intûs crenulato.

A richly-marked small species, the only specimen of which we have seen is in the Collection of Professor T. Bell; locality unknown.

34. *MARGINELLA FUSIFORMIS* (pl. lxxv. f. 76, 77.), *Hinds*, Zool. Proc. 1844.

*M.* fusiformi, albidâ vel pallidè corneâ; spirâ elatâ obtusâ; anfractu ultimo gradatim attenuato; labro paululùm incrassato, intûs lævi; aperturâ lineari; columellâ quadriplicatâ.

A small, fusiform, white shell, with the anterior parts of the whorls slightly angulated; the columella has four small folds, and the outer lip is smooth, swelled inwards near the centre.

In Capt. Belcher's Collection; from Straits of Malacca; taken in 17 fathoms, mud.

35. *MARGINELLA CANDIDA* (pl. lxxv. f. 86, 87.), *nobis*.

*M.* parvâ, ovatâ, albâ; spirâ brevi, anfractibus sub-rotundatis; aperturâ elongatâ, columellâ quadriplicatâ, labio externo intûs crenulato, extûs validè reflexo.

Described from a small white shell in the British Museum; differing from *M. Margarita* in being of a more oval form, having the mouth much longer and wider, and having the crenulations of the outer lip less distinctly prominent.

36. *MARGINELLA MARGARITA* (pl. lxxv. f. 66, 67.), *Kiener*, Sp. gen. coq. viv.

*M. parvâ*, ovatâ, albâ; anticè angustatâ, spirâ breviusculâ, conicâ, anfractibus prope suturam rotundatè sub-angulatis; columellâ quadriplicatâ; labio externo intùs dentato, extus validè varicoso.

A small white species not uncommon in Collections, from India.

36. *MARGINELLA CÆRULESCENS* (pl. lxxvii. f. 153, 154, 155.), *Lam. Anim. s. vert. vii. M. prunum, Gmel. Syst. p. 3445.*

*M. ovali*, sub-elongatâ, cinereâ, obscurè trifasciatâ; spirâ conicâ; anfractu ultimo versus apicem elevato, anticè marginato; aperturâ elongatâ, magnâ, intus validè fuscâ; columellâ anticè callosâ; plicis quatuor validis; labio externo posticè angulatim elevato, anticè minimè emarginato.

From Panama. Fig. 155 represents a dwarf variety.

38. *MARGINELLA CONSTRICTA* (pl. lxxvii. f. 156, 157.), *Hinds, Pro. Zool. Soc. 1844, p. 74.*

*M. "albidâ*, obscurè trifasciatâ; spirâ retusè conicâ; anfractu ultimo prope medium coarctato; labio incrassato, medio incurvato, intùs lævi, supernè ad spiram adscendente; columellâ quadriplicatâ."

In Mr. Cuming's Collection: locality unknown.

39. *MARGINELLA SAPOTILLA* (pl. lxxvii. f. 150, 151.), *Hinds, Zool. Proc. 1844.*

*M. "elongatè ovatâ*, ferè sub-cylindræo-ovatâ, cinereâ vel glaucescente, concolore; spirâ retuso-conicâ; aperturâ intùs fuscâ; labro incrassato, recto, albo, posticè fulvo, intùs lævi; columellâ quadriplicatâ."

Differing from *M. cærulescens* in being more cylindrical, and in not having the angular elevation of the outer lip.

In Panama; from 5 to 13 fathoms, sandy mud. Captain Belcher's and Mr. Cuming's Collection.

40. *MARGINELLA PULCHRA* (pl. lxxvii. f. 152.), *Gray, Breechey's Voyage.*

*M. cærulescenti* simili, sed spirâ magis productâ, anfractibus rotundatis; colore corneo fulvescente, fasciis obscurè purpureis.

Differing from *M. cœrulescens* in the spire being more produced and in the colouring, which is buff, with obscure purplish bands.

41. *MARGINELLA CINCTA* (pl. lxxvii. f. 165, 166.), *Kiener*, Sp. gen. coq. viv., p. 21.

*M. sub-ovali*, posticè sub-angulatâ, varice tumido, aurantiaco latera spiram et terminum anticum colligente; spirâ productâ, anfractibus rotundatis; aperturâ angustâ; columellâ callosâ, latè expansâ, plicis quatuor, quarum duabus anticis incrassatis, labio externo lævi, crasso, posticè emarginato.

More angular than *M. bivaricosa*, encircled with a bright orange callous margin, which surrounds the spire and is not doubled on the right side.

Mr. Cuming's Collection; locality unknown.

42. *MARGINELLA BIVARICOSA* (pl. lxxvii. f. 171, 172.), *Lam.* Vol. marginata, *Born*, Mus. t. 9. f. 5. 6.

*M. ovali*; varice tumido, uno latere duplicato, latera, spiræ partem, et terminum anticum colligente; spirâ productâ anfractibus rotundatis; aperturâ angustâ; columellâ callosâ, late expansâ, plicis quatuor; labio externo crasso, posticè emarginato.

Remarkable for the manner in which the lips of the aperture are extended and thickened round the sides, and at the back of the shell, nearly enveloping the spire, and forming a double ridge on the right side.

From Senegal.

43. *MARGINELLA AMYGDALA* (pl. lxxvii. f. 160, 161, 162.), *Kiener*, Sp. gen. coq. viv.

*M. ovali*, ventricosâ, pallidè cinereâ, ad latera et anticè tumidâ, fusco marginatâ; spirâ conicâ, anfractibus albo-marginatis; aperturâ intùs fuscâ, anticè sub-dilatâtâ; columellâ latè expansâ, albâ, plicis quatuor, quarum duabus anticis validis, spiralibus; labio externo albo, crasso, versùs apicem elevato, anticè sub-acuto, producto. Variat pallidè fulvâ, minùs ventricosâ; variat etiam cinereo-fuscâ.

Figures 160-1, may be taken to represent the typical form of this shell. Fig. 162, represents a rather young specimen of a less ventricose variety in the Collection of Mr. Cuming, who also possesses a pale fawn-coloured variety of similar form.

From Senegal.

44. *MARGINELLA QUINQUEPLICATA* (pl. lxxvii. f. 145, 146.), *Lam. anim. s. vert. vii.*

*M. pyriformi*, ventricosâ, pallidè griseâ, anticè areâ triangulari varice marginatâ; spirâ brevissimâ; aperturâ magnâ, posticè angulatâ; columellâ plicis quinque validis, duabus anticis proximis; prope medium anfractûs ultimi varice transverso plus minusve valido, labio externo ad suturam angulatim elevato, tum rotundato, deinde crasso, rectiusculo, anticè emarginato, extûs validè canali-fero.

Pyriform, ventricose, of a slaty colour, with a broad triangular varix at the anterior part of the last whorl; the spire short; the aperture posteriorly angulated, anteriorly widened; there are five thick folds on the columella, and a transverse callosity on the body whorl above the folds. The outer lip is broad, angular, with a groove behind the reflected margin.

A common shell; Mr. Cuming has it from Malacca.

45. *MARGINELLA ELEGANS* (pl. lxxvii. f. 147, 148, 149.), *Gmel. p. 3448. Voluta cancellata, Schrieber. Voluta undulata, Chem. et Voluta strigata, Dillwyn, inclusis.*

*M. sub-conicâ*, ventricosâ, pallidè griseâ, lineis nigrescentibus, fasciis albis interruptis, fasciatim cinctâ, vel lineis interruptis undulatis sparsim ornatâ, anticè varice acuto marginato; aperturâ latâ, columellâ anticè callosâ plicis quinque aurantiis quarum duabus anticis proximis; labio externo lævi, paululùm incurvo, ad extremitates subexpanso, plerumque aurantio, extûs validè reflexo.

The variety, fig. 148, is the *Voluta undulata* of Chemn.; it is rather more ventricose than the variety, fig. 147, which is *M. elegans* of Gmel.

From the East Indies.

46. *MARGINELLA TURBINATA* (pl. lxxv. f. 70, 71.), *nobis.*

*M. turbinatâ*, angulatâ, pallidè fulvâ; spirâ breviusculâ, anfractibus angulatis, ad angulum crenatis; columellâ quadriplicatâ; labio externo lævi, posticè angulato, in medio incurvo, anticè emarginato, ponè ad basin varicis columellari juncto.

At the base of this and several succeeding species there is a raised band or varix running from the columella round the back of the shell into the reflected edge of the outer lip. This differs from other species of the same group, in being turbinated in form and crenulated at the angle of the whorls.

Mr. Gaskoin's Collection; locality unknown.



47. *MARGINELLA SCRIPTA* (pl. lxxv. f. 83, 84, 85.), *Hinds*, Zool. Proc. 1844.

"*M. parvâ, retusè ovatâ, cinereâ, lineis nigris longitudinalibus validè angulatis, sparsim maculatis; spirâ retusissimâ; labro intùs denticulato; columellâ quinqueplicatâ, duabus superioribus transversis.*"

A conical shell, marked with beautiful dark zig-zag lines. The columella has five folds, and the outer lip is crenulated. The specimen (fig. 85.), which has the lines more minute and more undulated, is in the Collection of Mr. Bell. The others are from Mr. Cuming's specimens.

Straits of Macassar; in 11 to 15 fathoms, coarse sand.

48. *MARGINELLA AUSTRALIS* (pl. lxxv. f. 64, 65.), *Hinds*, Zool. Proc. 1844. p. 75.

"*M. testâ retusè ovatâ, albidâ vel pallidè corneâ, spirâ conico-retusâ; labro incrassato, ponè albido, intùs lævi; columellâ quadriplicatâ, versus basin albo fasciatâ.*"

Of a somewhat turbinated form, and greyish horn colour; remarkable for the strong white raised band, or varix, running at the anterior part of the last whorl into the strongly reflected outer lip, which is also white.

Mr. Cuming's Collection; from the north-west coast of Australia; taken in coral-sand at low water.

49. *MARGINELLA PYGMEA* (pl. lxxv. f. 78, 79.), *nobis*, Zool. Proc. 1846.

*M. coniformi, lævi, pallidissimè fulvâ; spirâ brevi; aperturâ elongatâ; columellâ minutè quadriplicatâ; labio externo lævi, extùs varicosâ.*

Resembling *M. Sauliæ* in general form, but wanting the coloured lines, and having the outer lip externally varicose. There is also a varix at the anterior part of the whorl. The specimen is in the Collection of Mr. Bell. Locality unknown.

50. *MARGINELLA SAULÆ* (pl. lxxv. f. 68.), *nobis*.

*M. conico-subovali, lævi, pallidissimè fulvâ, lineis rubris binis cinctâ; spirâ brevi; aperturâ elongatâ, columella quadriplicatâ, plicâ ultimâ subincrassato, labio externo, in lævi, medio paululum incurvâ, extùs minimè varicosâ.*

A beautiful small, rather conical, smooth shell with two reddish lines across the last whorl. The spire is very short, the aperture

long; the columellâ with four folds, and the outer lip smooth, scarcely raised from the body whorl at its reflected margin.

From Miss Saul's Collection; locality unknown.

51. *MARGINELLA CONOIDALIS* (pl. lxxvi. f. 93, 94, 97-101.), *Kiener*. Sp. Coq. viv. *Marginella*, p. 37. *M. apicina*, *Menke*.

*M. ovato-conicâ*, albâ, interdum apice rubrâ, vel carneâ fasci-tribus pallidis griseis; spirâ brevi; columellâ sub-callosâ quadripli-catâ; labio externo lævi, plus minùsve crasso, postice emarginato. in medio sub-incurvo, extùs varicoso.

Several varieties occur of this conical species, and some speci-mens are less angularly conical than others. Figures 93 and 94 were engraved with a view to describing the shell as a separate species; subsequent examination, however, proved it so near to the variety figured at 101, and the gradation from that to the more conical varieties appeared so complete, that it seems impossible to separate them.

From the East Indies; variety fig. 100, from Honduras.

52. *MARGINELLA DIAPHANA* (pl. lxxvi. f. 95, 96.), *Kiener*. Sp. gen. coq. viv. *Marginella*, p. 38. *M. pellucida*, *Pfeiffer*—?

*M. conicâ*, corneâ, diaphanâ; spirâ brevi; columellâ quadripli-catâ; plicis duabus anticis magnis; labio externo lævi, anticè angulato, extùs fusco marginato.

Differing from *M. conoidalis* in being transparent, and having a much thinner outer lip.

From Cuba.

53. *MARGINELLA VITREA* (pl. lxxv. f. 74, 75.), *Hinds*. Zool. Proc. 1844.

*M. coniformi*, hyalinâ, nitidâ; spirâ valdè retusâ; labro paulu-lùm incrassato et reflexo, intùs lævi; columellâ plicis quatuor gracilibus."

Much more angular and conical than *M. margarita*, with the outer lip smooth.

In the Collections of Capt. Belcher and Mr. Bell; from the west coast of Africa.

54. *MARGINELLA INCONSPICUA* (pl. lxxv. f. 80.), *nobis*.

*M. elongato-ovali*, lævi, palidissimè fulvâ; spirâ brevi; aperturâ elongatâ; columellâ minutè quadriplicatâ; labio externo lævi extùs vix varicosâ.

A small, pale, oval shell, with short spire, and aperture proportionately lengthened. The outer lip is smooth. The collumellar folds are small. The specimen is in Mr. Bell's Collection.

Locality unknown.

55. *MARGINELLA EVANIDA* (pl. lxxv. f. 69.), *nobis*.

*M. elongato-ovali, lævi, albâ; spirâ brevi; aperturâ angustatâ; columellâ quadriplicatâ, plicis duabus anticis tumidis; labio externo crasso, in medio incurvo, extûs vix varicoso.*

The outer lip of this small white species is thick, and bent inwards so as to narrow the aperture. The last two of the four folds on the collumella are close together and tumid.

Mr. Bell's Collection; locality unknown.

56. *MARGINELLA MINIMA* (pl. lxxviii. f. 220.), *Guilding*.

*M. minutissimâ, albâ, pellucidâ, subcylindricâ, anticè obliquè sub-angustâ; spirâ vix exsertâ; columellâ anticè inæqualiter triplicatâ; labio externo posticè angulatim elevato, intûs lævi, extûs vix varicosâ.*

A very minute, transparent, white, oval shell; with the outer lip smooth, and three unequal folds on the columella.

From St. Vincents.

57. *MARGINELLA MONILIS* (pl. lxxvi. f. 117, 118.), *Lam.* (Volvaria) vii. p. 363.

*M. ovali, sub-cylindricâ, opacâ, nitidâ, lacteâ; spirâ vix productâ, anfractu ultimo ad apicem tumidè elevato ad latera calloso, anticè varicoso; aperturâ elongatâ, columellâ tumidè expansâ, plicis sex, quarum posticis tribus parvis, anticâ unicâ parvâ, sub-retusâ; labio externo crasso rectiusculo, posticè emarginato, anticè sub-quadrato, vix emarginato; extûs leviter varicoso.*

A small, white, oval or sub-cylindrical species, with the spire nearly hidden by the tumid elevation of the outer lip. The collumellar lip is spread and thickened so as to form a kind of lateral edge to the back of the shell, which is continued round the last whorl. Great numbers of this species are used by the Africans for necklaces.

From Senegal.

58. *MARGINELLA TRITICEA* (pl. lxxvi. f. 119, 120, 121.), *Lamark*, (Volvaria) vol. vii. *Voluta exilis*, *Wood's* catalogue.

*M. elongatâ, sub-conicâ, posticè subangulatâ, anticè sub-coarctatâ, pallidè fulvâ, fasciis tribus latis, fulvis vel cinctâ; spirâ*

conicâ; aperturâ angustatâ, elongatâ; columellâ plicis quatuor minutis prope terminum anticum; labio externo lævi, incurvo, extûs varicoso.

Elongated, nearly conical, slightly angulated at the posterior part of the whorls, narrowed towards the anterior termination; aperture narrow, long; columella with 4 minute folds close to the anterior; outer lip smooth, externally varicose.

Mediterranean.

59. *MARGINELLA NITIDA* (pl. lxxvi. f. 131.), *Hinds*, Zool. Proc. 1844.

*M.* "elongatè ovatâ, fuscâ, politâ, nitidâ, concolore; spirâ conicâ, obtusâ; labro tenui, acuto, inflexo, pallido; columellâ quadriplicatâ."

Of a lengthened oval form, and dark brown colour; the aperture narrow, the columella with four oblique folds, the outer lip slightly thickened, bent inwards near the centre.

In Mr. Cuming's Collection; locality unknown.

60. *MARGINELLA INFLEXA* (pl. lxxvi. f. 132.), *nobis*.

*M.* elongatâ, prope medium sub-angulatâ, lævi, fuscâ, versûs basin sub-angustatâ; spirâ productâ; apice obtuso, suturâ albâ; anfractu ultimo fasciâ rubrâ prope suturam cincto: aperturâ angustâ, columellâ quadriplicatâ, anticè spiraliter albâ; labio externo incurvo, crasso, angulato, anticè sub-dilatato.

A neat, brown shell, narrow, with the spire produced, and the outer lip angulated near the centre; a white line close to the suture and a reddish brown band under it. The spire is more produced, and the angle nearer the centre, than in *M. nitida*.

Mr. Bell's Collection.

61. *MARGINELLA FASCIATA* (pl. lxxvi. f. 142.), *nobis*.

*M.* parvâ, cylindricâ, anticè sub-attenuatâ, lævi, fasciis fuscis binis, et lineis nigrescentibus quinque cinctâ; spirâ brevi; aperturâ elongatâ, angustatâ; columellâ validè quadriplicatâ; labio externo lævi, rectiusculo, extûs paululùm incrassato.

A small, cylindrical species, rather tapering towards the anterior extremity, beautifully banded by broad zones of brown, edged with darker brown. The folds on the columella are rather stronger than in most species of the same group.

Specimens in the British Museum; locality unknown.



62. *MARGINELLA VARIA* (pl. lxxvi. f. 137-141.), *nobis*. Proc. Zool. 1846.

*M. elongatâ, lævi, anticè expansâ, albâ, vel fuscâ, vel fusco vel rubro trifasciatâ, vel purpureo longitudinaliter et spiraliter interruptim fasciatâ, spirâ plus minusve productâ; aperturâ posticè angustâ, anticè sub-expansâ; columellâ quaduplicatâ; labio externo in medio incurvo, extûs leviter varicoso.*

Differing from *M. lactea*, of Kiener, in being wider at the anterior termination, and in the outer lip not being so much elevated.

From the West Indies. The varieties represented by figs. 141 and 138 are from Honduras Bay.

63. *MARGINELLA LACTEA* (pl. lxxvi. f. 143, 144.), *Kiener*, Sp. gen. coq. viv. *Marginella*, p. 42.

*M. parva, elongatâ, lævi, albâ, anticè sub-coarctatâ; spirâ brevi obtusâ; aperturâ angustâ; columellâ ad basin leviter quaduplicatâ; labio externo lævi, ad apicem elevato.*

Small, elongated, white, rather narrowed anteriorly, the outer lip is raised to the apex.

From the West Indies; common.

64. *MARGINELLA PALLIDA* (pl. lxxvi. f. 108.), (*Volvaria*), *Lamarck*, vol. 7.

*M. cylindricâ, tenui, anticè sub-expansâ, pallidè fulvâ, leviter trifasciatâ; columellâ in medio sub-ventricosâ, tum arcuato, anticè obliquè quaduplicatâ; labio externo tenui, lævi, incurvo, anticè expanso, extûs vix incrassato.*

A thin, cylindrical shell, with a very short spire, four thin, oblique folds on the columella, the mouth widened anteriorly and the outer lip scarcely thickened.

From the West Indies.

65. *MARGINELLA CYLINDRICA* (pl. lxxvi. f. 134.), *nobis*.

*M. cylindricâ, tenui, pallidè fulvâ, leviter fasciatâ; spirâ brevi; columellâ anticè triplicatâ, labio externo lævi sub-incrassato.*

Less cylindrical, with a more produced spire and the aperture narrower at the anterior than in *M. pallida*. The outer lip is also more thickened.

Specimens in the Collection of Mr. Bell. Locality unknown.

66. *MARGINELLA NEGLECTA* (pl. lxxvi. f. 135, 136.), *nobis*.

*M. parvâ, elongato-subovali, pallidè fulvâ, trifasciatâ; columellâ*

quadriplicatâ; aperturâ posticè angustatâ, anticè subexpansâ; labio externo in medio sub-incurvo, extûs vix incrassato.

A minute species differing from *M. cylindrica* in general form having a much more produced spire.

Locality unknown.

67. *MARGINELLA TÆNIATA* (pl. lxxvi. f. 128, 129.), *nobis*. Zool. Proc. 1846.

*M. ovali*, cylindricâ, pallidè fulvâ, fasciis fuscis tribus cinctâ; spirâ brevi, aperturâ elongatâ, posticè sub-angustatâ; columellâ plicis quatuor quarum duabus anticis majoribus; labio externo lævi, latè reflexo.

Differing from *M. avena*, in having a short spire, and the outer lip more broadly reflected.

In Mr. Cuming's Collection. Locality unknown.

68. *MARGINELLA AVENA* (pl. lxxvi. f. 130.), *Valenciennes*, Kiener, Sp. gen. coq. viv. Marginella, p. 17.

*M. parvâ*, oblongâ, sub-cylindricâ, albâ vel pallidè flavidâ, sub-diaphanâ; spirâ conicâ; columellâ quadriplicatâ; labio externo lævi, prope medium incurvo, extûs paululùm varicoso.

Small, oblong, rather cylindrical, white, or pale yellowish fawn-coloured, the spire conical, the columella with four folds; the smooth outer lip bent inwards near the centre.

In Mr. Cuming's Collection. From Baclayon, Isle of Bohol.

69. *MARGINELLA FAUNA* (pl. lxxvi. f. 126, 127.), *nobis*. Zool. Proc. 1846.

*M. ovali*, sub-cylindricâ, pallidissimè carneâ, spirâ brevi; columellâ obliquè quadriplicatâ; labio externo prope medium incurvo, extûs sub-incrassato.

Slightly resembling *M. pallida*, but more oval; the lower part of the aperture less open, and the outer lip thicker.

Mr. Cuming's Collection. Locality unknown.

70. *MARGINELLA RUBELLA* (pl. lxxvi. f. 133.), ———?

*M. elongato-ovalis*, pallidissimè roseâ, spirâ brevi; columellâ obliquè quadriplicatâ; labio externo in medio incurvo, extûs vix incrassato.

A smooth oval, pale pink species, with four folds on the columella, and the outer lip slightly thickened and bent inwards near the centre.

71. *MARGINELLA ZONATA* (pl. lxxvi. f. 115, 116.), *Kiener*,  
Sp. gen. coq. viv. *Marginella*.

*M. cylindricâ*, lævi, albâ, lincis rubris binis, vel fasciâ fuscâ latâ, unicâ cinctâ; spirâ brevi; aperturâ elongatâ, anticè sub-expansâ; columellâ plicis quatuor ad quinque prope terminum anticum, quarum anticis majoribus; labio externo subrecto, subincrassato.

Cylindrical, with broad band in the centre of the last whorl, edged by two dark brown lines, in one variety, and two reddish lines alone. There are four or five small folds at the anterior termination of the columella, of which the last are the largest.

From the West Indies. The bi-lineated variety from the Cape of Good Hope. In Mr. Cuming's collection.

72. *MARGINELLA FUSCA* (pl. lxxvi. f. 122, 123.), *nobis*, Zool. Proc. 1846.

*M. elongatâ*, sub-ovali, posticè sub-angulatâ, anticè latè marginatâ, in medio paululùm contractâ, fuscâ, vel pallidè purpureâ, fusco-trifasciatâ; spirâ breviusculâ, apice obtuso; aperturâ angustatâ, columellâ rectiusculâ, plicis quatuor, quarum duabus anticis albis, prominentibus, spiraliter elongatis; labio externo albo, intùs in medio incurvo, extùs fusco, latè reflexo.

Differing from *M. nitida*, in the colouring, in the shortness of the spire, and in the outer lip being more broadly reflected. In Mr. Cuming's collection. From the West Indies.

73. *MARGINELLA CRASSILABRUM* (pl. lxxvi. f. 124, 125.), *nobis*, Zool. Proc., 1846.

*M. sub-ovali*, in medio sub-angulatâ, pallidè griseo-fulvâ; spirâ brevi; anfractibus distinctis, ultimo dilatato, ad spiram elevato; columellâ plicis quatuor, quarum duabus anticis prominentibus, spiraliter elongatis; labio externo, crasso, latè incurvo, angulato, extùs varicoso, ad apicem tumidè elevato.

This species is remarkable for the broad, angular disc formed by the outer lip, which is much thickened at the back and raised so as nearly to cover the spire. In Mr. Cuming's collection. From W. Indies.

74. *MARGINELLA OLIVÆFORMIS* (pl. lxxvii. f. 163, 164.), *Kiener*, Sp. gen. coq. viv.

*M. ovato-oblongâ*, anticè sub-attenuatâ; pallidè carneâ, obscurè trifasciatâ; spirâ productâ; columellâ plicis quatuor quarum

duabus anticis proximis; labio externo lævi, in medio incurvo, anticè minimè emarginato, extùs validè et nitidè emarginato.

Resembling *M. constricta*, but not so much contracted in the centre of the last whorl. From Senegal.

75. *MARGINELLA FRUMENTUM* (pl. lxxviii. f. 221, 222.), *Sowerby*, Zool. Proc., 1831. p. 57.

*M. ovali*, subventricosâ, stramineâ, fasciis pallidè rubris et lineis undulatis per seriebus dispositis; spirâ planatâ, circulari, margine punctatâ; aperturâ albâ, anticè emarginatâ; columellâ anticè maculâ unicâ fuscâ, plicis quatuor quarum duabus anticis majoribus; labio externo lævi, extùs vix incrassato.

Oval, ventricose, with bands of pale brown between three series of undulated reddish brown lines across the whorl; spire flattened, circular; columella with four small plaits and a brown spot on the anterior part, which is swelled. The outer lip is smooth, and very little thickened at the outside. From the West Indies.

76. *MARGINELLA PULCHELLA* (pl. lxxviii. f. 213, 214, 215.), *Kiener*, Sp. gen. coq. viv. p. 27.

*M. ovali*, anticè marginatâ, stramineâ, lineis undatis et angulatis, rubris ornatâ; spirâ celatâ, marginatâ; aperturâ spiram superante; columellâ anticè tumidâ, plicis numerosis parvis, duabus, anticis majoribus; labio externo albo, intùs lævi, anticè emarginato, extùs vix incrassato.

Narrow, oval, with a raised edge at both extremities, marked by undulating and angular lines of light reddish brown. From Sydney.

77. *MARGINELLA CATENATA* (pl. lxxviii. f. 225, 226.) *Trans. Linn. Soc.* p. 133.

*M. parvâ*, ovali, ventricosâ, pallidissimè stramineâ, lineis albis rubro angulatis maculatis quinque; spirâ planatâ, circulari; columellâ quadriplicatâ; labio externo spiram superante, anticè emarginato, extùs vix incrassato.

This small British species is marked by narrow white bands spotted with red.

78. *MARGINELLA SAGITTATA* (pl. lxxviii. f. 223, 224.), *Hinds*, Zool. Proc., 1844.

“*M. testâ retuso-ovatâ, pallidâ, lineis rufis sagittatis, transversis,*



alteris longitudinalibus confluentibus, ornatâ; apice punctulato; labro sub-reflexo, intus lævi; columellâ vix quadriplicatâ."

*Hab.* Brazils. *Cab.* Cuming.

The markings are arrow-headed, arrayed in transverse rows, which are connected by bands of undulating fine lines.

79. *MARGINELLA PHRYGIA* (pl. lxxviii. f. 218, 219.). *nobis.*

*M.* parvâ, ovali, posticè sub-quadratâ, pallidè fulvâ, maculis guttuliformibus in seriebus angulatis dispositis ornatâ; spirâ planatâ circulari, margine punctatâ; aperturâ albâ, anticè emarginatâ; columellâ anticè tumidâ, plicis quinque, quarum duabus anticis magnis; labio externo posticè spiram superante; extus vix incrassato.

This beautifully marked small species differs from *M. guttata* of Swainson, in shape; the spire is flattened but not hidden entirely.

In Professor Bell's Collection.

80. *MARGINELLA GUTTATA* (pl. lxxviii. f. 208, 209, 210.), *Swainson*. Zoological Illustrations. *M. maculosa*, *Kiener*.

*M.* ovali, sub-ventricosâ, pallidissimè fulvâ, maculis guttuliformibus fasciatim ornatâ; spirâ celatâ; aperturâ albâ, angustâ anticè validè emarginatâ; columellâ anticè varicosâ, plicis duabus posticis parvis, unicâ latâ validâ, alterâ magnâ terminali; labio externo intus lævi, extus vix incrassato.

Oval, sub-ventricose, mottled with tear-shaped spots arranged in bands. The spire hidden; the aperture lengthened; the columella with two small posterior folds, then one broad and flat, swelled into a varix, and the last large and oblique. The outer lip is anteriorly emarginated, smooth within and scarcely thickened without.

In Mr. Cuming's Collection; from St. Vincents.

81. *MARGINELLA MURALIS* (pl. lxxviii. f. 217.), *Hinds*, Zool. Proc. 1844. p. 75.

"*M.* testâ elongatè ovatâ, ferè subcylindraceâ, lacteâ, nitidâ; maculis pallidè rufis quadratis transversis ornatâ, interdum albo-marginatis, majoribus per series tres dispositis; labro vix incrassato, sub-inflexo, intus sulcato; columellâ plicis tribus inferioribus distinctis, obliquis, alteris superioribus obsoletis transversis."

The markings are disposed in rows of square patches; the three largest rows being in the centre and near each extremity.

In Mr. Cuming's Collection. The locality is unknown.

82. *MARGINELLA TESSELLATA* (pl. lxxviii. f. 194–197.), *Lam. Anim. s. vert. vii. p. 361.*

*M. ovali*, albâ, vel stramineâ, maculis subquadratis magnis fasciatim ornatâ; spirâ penè celatâ, apice fasciâ rubrâ circulari cinctâ; aperturâ anticè et posticè validè emarginatâ; columellâ albâ, in medio tumidâ, anticè in varicem tumidum elevatâ, plicis quatuor ad quinque obscuris, inæqualibus; labio externo intùs albo, crenato, extùs fusco, varicoso.

A common species from Venezuela, distinguished by the dark squarish spots arrayed in broad bands with narrow passages between.

83. *MARGINELLA MULTI-LINEATA* (pl. lxxviii. f. 192, 193.), *nobis. Zool. Proc. 1846.*

*M. ovali*, stramineâ, lineis rubris numerosis cinctâ; spirâ penè celatâ, apice fasciâ circulari cinctâ; aperturâ anticè et posticè emarginatâ; columellâ albâ, in medio tumidâ, anticè callosâ, plicis quatuor ad quinque inæqualibus; labio externo albo, intus crenulato, in medio sub-angulato, extùs tenuiter reflexo.

On the whole resembling *M. tessellata*, but it is much shorter, with the outer lip less varicose on the outside, and coloured by numerous red lines instead of the square patches.

In Mr. Cuming's Collection.

84. *MARGINELLA INTERRUPTA* (pl. lxxviii. f. 201–205.), *Lam. Anim. s. vert. viii. p. 362.*

*M. ovali*, stramineâ, lineis interruptis, rubris vel nigris cinctâ; interdum fusco-maculatâ; spirâ celatâ; aperturâ anticè et posticè emarginatâ, spiram superante, columellâ crassâ, in medio tumidè ventricosâ, posticè in varicem elevatâ, anticè expansâ, varicosâ, plicis septem irregularibus; labio externo arcuato, intùs crenulato, extùs plus minusve varicoso, nitidè marginato.

Of an oval and rather irregular form, with the spire hidden and the lips of the aperture raised beyond it; the columella lip is tumid, at the apex raised into a varix, in the centre swelling so as to form a ventricose outline and anteriorly raised into a sort of blunt tooth; it has irregular plaits on the pillar. The outer lip is denticulated within and neatly marginated without. In colouring there are many varieties, but all are marked with more or less interrupted transverse lines.

From Demerara.

85. *MARGINELLA SIMILIS* (pl. lxxviii. f. 206, 207.), *nobis*.  
Zool. Proc. 1846.

M. ovali, stramineâ, griseo nebulatâ, lineis creberrimis interruptim cinctâ; spirâ penè celatâ; aperturâ angustâ, anticè et posticè emarginatâ; columellâ ad spiram tumidâ, anticè varicosâ, irregulariter septemPLICATâ; labio externo posticè spiram paulûlum superante, intûs crenulato, extûs nigro maculato, vix marginato.

The spire is less concealed, and the margin of the reflected lip less distinct than in *M. interrupta*. The colouring is more mottled.

In Mr. Cuming's Collection. From Brazil.

86. *MARGINELLA IMBRICATA* (pl. lxxviii. f. 211, 212.), *Hinds*,  
Zool. Proc. 1844. p. 76.

M. *interrupta* similâ sed angustiorâ et maculis rufis quadratis prope medium unifasciatâ.

It is immaterial whether this be considered as a variety of *M. interrupta*, or distinct. It is narrow, and has a row of square spots near the centre of the last whorl.

In Mr. Cuming's Collection. Collected at Acapulco, by Col. Moffat.

87. *MARGINELLA KIENERIANA* (pl. lxxviii. f. 198, 199, 200.),  
*Petit*, Magas. de zool. 1838. p. 110.

M. "testâ parvâ, pyriformi, fulvâ, maculis albis transversis per series quatuor dispositis ornatâ; spirâ brevissimâ, exsertiusculâ; labro dextro crasso, intûs vix crenulato, columellâ octoplicatâ."

Pyriform, dark brown or pale yellow, with four rows or triangular white spots edged by angular lines, which are reddish brown on the yellow ground, or dark grey on the brown. The columella is thickened and flattened and has folds nearly up to the posterior extremity almost in the manner of a *Cypræa*. The outer lip is finely denticulated.

From Venezuela. Mr. Cuming possesses both varieties.

88. *MARGINELLA LABIATA* (pl. lxxvi. f. 104, 105.), *Kiener*,  
Sp. gen. coq. viv.

M. ovato-conicâ, lævi, pallidè roseâ, fasciis pallidis nigrescentibus fasciatâ; spirâ brevi; anfractu ultimo posticè ad marginem tumido; aperturâ elongatâ, angustâ; columellâ quadriplicatâ, expansâ, posticè et anticè callosâ; labio externo crasso, intûs irregulariter crenulato, extus validè varicoso, aurantiâ marginato.

Conical, with a short spire, smooth, of a pale rose colour with faint greyish bands. The outer lip extends over the spire and at the back of it, at the upper part of the body whorl, is a calosity.

Gulf of Mexico.

88.\* *MARGINELLA OBESA* (pl. lxvi. f. 91, 92.), *nobis*.

*M. labiata* similimâ sed magis elongatâ, spirâ magis productâ.

This species is more elongated than *M. labiata*, with the spire more produced. In Professor Bell's Collection.

89. *MARGINELLA CURTA* (pl. lxxvii. f. 88, 89.), *Sow. Zool. Proc.*

*M. conico-subovali*, fusco-cærulescente, transversim pallidè fasciatâ; spirâ brevi, conicâ; aperturâ angustatâ, castaneâ; columellâ callosâ, expansâ, castaneo marginatâ, quadriplicatâ; labio externo crasso, lævi, posticè validè emarginato, intûs albo, extûs castaneo, validè varicoso.

Of a short, conical form, and greyish brown colour crossed by white interrupted bands in both directions. The columella is thickened and spread over the body whorl. The outer lip is smooth, very deeply emarginated at its union with the body whorl. The inside of the mouth, the outer edge of the inner and outer lips are of a very deep chesnut colour.

Casma and Samauco, Peru.

90. *MARGINELLA LONGIVARICOSA* (pl. lxxvi. f. 112, 113.), *Lam. vii. p. 358. M. guttata, Dillw. i. p. 526.*

*M. oblongo-ovali*, lævi, carneâ maculis albis, rotundatis sparsâ; spirâ parvâ, mamelliformi; anfractu ultimo prope marginem posticè calloso, suturâ fusco cinctâ; aperturâ elongatâ posticè canaliculatâ angustatâ; collumellâ callosâ, expansâ, quadriplicatâ; labio externo crasso, lato, anticè vix emarginato, intûs lævi, extûs varicoso, fusco fasciato.

Oval, oblong, smooth, of a flesh colour sprinkled with round white spots; spire very small, mammeliform, the last whorl swelled at the posterior part near the margin. The suture is banded with brown. The aperture is lengthened, the collumellar lip spread thickly over part of the body whorl, the outer lip very thick and broad and crossed by rich brown bands.

There is a variety in Mr. Cuming's Collection, of a pale colour, without the bands. From Honduras Bay and Jamaica.



91. *MARGINELLA NIVOSA* (pl. lxxvi. f. 109, 110), *Hinds*, Zool. Proc.

M. "ovatâ, cinereo-fuscâ; maculis lacteis laceratis super lineas longitudinales dispositis; spirâ retusâ; labro sub-recto, incrassato, albo, ad spiram adscendente, intus infra medium leviter denticulato; columellâ quadriplicatâ."

Something like *M. longivaricosa*, but of a darker colour, having white spots or interrupted bands, and having the spire much more produced and conical.

Mr. Cuming's Collection; locality unknown.

92. *MARGINELLA CARNEA* (pl. lxxvi. f. 102, 103, 114.), *Storer*, Boston Journal of Science.

M. oblongo-ovali, lævi, pallidissimè fulvâ, fasciis latis, tribus, carneis vel aurantiacis cinctâ, spirâ brevi; anfractu ultimo prope marginem posticè calloso, prope medium sub-angulato; aperturâ angustatâ, elongatâ; posticè canaliculatâ, columellâ callosâ, expansâ, quadriplicatâ; labio externo crasso, lato, anticè paululùm emarginato, intus lævi, extus varicoso, fusco-fasciato.

Resembling *M. longivaricosa* but having an angle in the last whorl, and the colour arranged in three broad bands. The spire is also more produced.

From West Indies; a very strangely coloured variety from Honduras Bay. Variety, fig. 103, in Mr. Gaskoin's Collection.

93. *MARGINELLA PRUINOSA* (pl. lxxvi. f. 3.), *Hinds*, Zool. Proc. 1844.

M. "ovatâ, coarctatâ, albidâ, obsoletè trifasciatâ; maculis parvis lacteis conspersâ; spirâ conico-retusâ, sub-callosâ; labro incrassato, paululùm incurvato, intus leviter denticulato; aperturâ angustâ; columellâ quadriplicatâ.

Differing from *M. longivaricosa* in having a more produced spire and a depression in the centre of the last whorl. It is a pale shell, with spots of white in rows.

Mr. Cuming's Collection; from the West Indies.

94. *MARGINELLA OBLONGA* (pl. lxxvi. f. 106, 107.), *Swains*. Zool. Illus.

M. *carnea* similimâ, sed magis elongatâ.

Having the character of the *M. carnea*; excepting that it is much longer.

95. *MARGINELLA ANGUSTATA* (pl. lxxvii. f. 169, 170.), *nobis*.  
Zool. Proc., 1846. *Voluta bullata*, *Gmel.* and *Kiener*.

*M. elongato-ovali*, pallidè rubrâ vel crimeâ, lineis rubris interruptis fasciatim cinctâ; spirâ celatâ; aperturâ elongatâ, ad apicem extensâ; columellâ posticè et anticè callosâ, plicis tribus, quarum anticâ unicâ magnâ, penè duplicatâ; labio externo crasso, albo, extûs rubro, latè et tenuiter expanso.

The true *M. bullata* is figured so unquestionably in Born and Chemnitz, that it is a matter of surprise that M. Kiener should have followed Gmelin in applying the name to this species. *M. angustata* is narrow, with bands of colour crossing each other in the two directions, and the spire hidden by the outer lip, which is thinly and broadly reflected. From the East Indies.

96. *MARGINELLA MILIARIA* (pl. lxxviii. f. 227 to 230.), *Linn.*  
*Syst. Nat.* vol. xii. p. 184. *M. oryza*, *Lam.*, inclusâ.

*M. parvâ*, pyriformi, ventricosâ, albâ vel pallidè fulvâ, fasciâ latâ, fuscâ, in medio cinctâ, posticè marginatâ, spirâ parvâ, rubro cinctâ; aperturâ elongatâ, anticè emarginatâ; columellâ quinqueplicatâ, labio externo intûs crenulato, posticè emarginato, extûs paululùm incrassato.

Small, pyriform, white or pale-brown, with a broad brown band, spire small, encircled with a reddish line; aperture lengthened, marginated at both extremities; columella thickened, with about five folds; outer lip crenulated within, slightly thickened on the outside.

From Senegal.

97. *MARGINELLA PERSICULA* (pl. lxxviii. f. 189, 190, 191.),  
*Voluta Persiula*, *Linn.* *Syst. Nat.* ed. 12. p. 1189. *M. avellana*,  
*Lam. Anim. s. vert.* vol. vii. inclusâ.

*M. breviter sub-ovali*, pallidè fulvâ, punctis rubris ornatâ; spirâ celatâ, aperturâ spiram superante, posticè et anticè validè emarginatâ, columellâ callosâ, albâ, prope spiram varice valido, anticè ad marginem quinqueplicato, plicâ magnâ obliquâ terminali; labio externo posticè arcuato, intûs crenato.

This species and *M. lineata* differ only in the latter having lines, and the former, spots. While retaining this as, at least, a recognizable distinction, we cannot establish any distinction between the variety of *M. persicula* (f. 189.) with large spots, *M. avellana*, *Lam.*, and the variety having the spots much smaller.

From the river Gambia.

98. *MARGINELLA LINEATA* (pl. lxxviii. f. 185, 186.), *Lam.*  
*Anim. s. vert.* vol. vii.

*M. breviter sub-ovali, pallidè fulvâ, lineis rubris obliquè lineatâ; spirâ celatâ; aperturâ spiram superante; columellâ callosâ albâ, prope spiram varice valido, anticè ad marginem quinque-plicato, plicâ magnâ obliquâ terminali; labio externo posticè arcuato, intùs crenato, pone spiram validè emarginato, anticè validè emarginato.*

Of a shortened oval form, and pale straw colour, with oblique transverse red lines which sometimes run obliquely into each other, and are sometimes interrupted. There is a strong notch at the union of the outer and inner lips, which are both extended beyond the spire.

99. *MARGINELLA CORNEA* (pl. lxxviii. f. 183, 184.), *Lam.*  
*Anim. s. vert.* vii. p. 360.

*M. elongato-ovali, corneâ, obscurè fulvo quinque-fasciatâ, spiram superante; columellâ albâ, tenuiter expansâ, posticè callosâ, anticè spiraliter varicosâ, plicis sex ad septem obscuris; labio externo intùs radiatim plicato, anticè pone spiram emarginato, extùs angustè reflexo.*

Of a lengthened oval form, horn coloured, with five obscure bands of brown. There is a notch at the juncture of the inner and outer lips, the inside of which is grooved. From Senegal.

100. *MARGINELLA SARDA* (pl. lxxviii. f. 174, 175.), *Kiener.*  
*Sp. gen. coq. viv.* *Marginella* p. 30.

*M. ovali, ventricosâ, pallidè roseâ, obscurè purpureo fasciatâ; spirâ celatâ; aperturâ spiram superante; columellâ callosâ, expansâ, posticè varice tumido, anticè tumidâ, plicis quatuor, quarum anticis duabus angulatis; labio externo crasso, intùs acutè dentato, extùs aurantio, latè reflexo, validè varicoso.*

Much shorter than *M. L'argillieri*, &c., with a neatly toothed edge to the outer lip. In Mr. Cuming's collection. Ceylon.

101. *MARGINELLA BLANDA* (pl. lxxvii. f. 167, 168.), *Hinds,*  
*Zool. Proc.*, March, 1844.

"*M. testâ ovatâ, tenui, sardonychiâ, obsoletè fasciatâ; spirâ vix occultâ, pallidâ; labro incrassato et sub-reflexo, intùs lævi; columellâ albidâ, sexplicatâ, plicis superioribus evanidis.*"

*Hab.* Cape Blanco, West coast of Africa, in twelve to fifteen fathoms.

Not having the shell we copy the figures and description.

102. *MARGINELLA OVULUM* (pl. lxxviii. f. 188.), *nobis*.

M. ovali, lævi, albâ, spirâ celatâ; aperturâ spiram superante; columellâ anticè quadriplicatâ, labio externo integro lævi, extûs latè et tenuiter reflexo.

A most complete little *Ovulum* but for the folds on the columella. In Mr. Bell's collection. The locality is unknown.

103. *MARGINELLA DACTYLUS* (pl. lxxviii. f. 187.), *Lam.* Anim. s. vert. vol. vii.

M. cylindricâ, pallidè fulvâ, spirâ celatâ; aperturâ spiram superante, columellâ plicis quinque, spiraliter extensis; labio externo lævi, integro, latè expanso.

Cylindrical, pale fawn, with the spire hidden; the aperture over-reaching the spire as in the genus *Ovulum*. There are five folds on the columella. Locality unknown.

104. *MARGINELLA BULLATA* (pl. lxxvii. f. 158, 159.), *Born,* Mus. p. 218. *Chemn.* 159. t. 150. f. 1409, 1410. M. Bellangeri, *Kiener* Sp. gen. coq. *Marginella* p. 27.

M. magnâ, sub-pyriformi, ventricosâ, pallidè carneâ, leviter fasciatâ; spirâ retusâ, umbilicatâ; aperturâ intûs fulvâ, columellâ anticè spiraliter callosâ; quadriplicatâ, labio externo lævi, albâ, extûs validè varicosâ, aurantiacâ.

This large and elegant species is ventricose at the upper part, and tapers off towards the anterior. The spire is in a slightly hollowed disc. The colour is pale buff, lightly banded, reddish brown inside the aperture, and the margin of the outer lip orange. Fig. 159 represents a pale lemon coloured variety in Mr. Cuming's collection. The species is from Brazil.

105. *MARGINELLA TRICINCTA* (pl. lxxviii. f. 181, 182.), *Hinds,* Zool. Proc., March, 1844, p. 76.

"M. testâ obeso-ovatâ, cinereo-cærulescente, fusco trifasciatâ, labro incrassato, luteo, intûs lævi; columellâ sexplicatâ, ad basin albâ; plicis tribus superioribus transversis, supremâ paululùm obsoletâ."

Oval, ventricose, rather narrowed anteriorly, of a greyish colour, with three reddish brown bands. The spire is hidden, the outer lip going beyond it. The columella has six folds. Capt. Belcher's and Mr. Cuming's collection. Taken in the straights of Macassar; in eleven fathoms, coarse mud.



106. *MARGINELLA LILACINA* (pl. lxxviii. f. 176, 177.), *nobis*.

*M. ovali*, pallidè lilacinâ, fasciâ latâ pallidè purpureâ cinctâ; spirâ celatâ, umbilicatâ; aperturâ spiram superante; columellâ posticè et in medio callosâ, anticè paululùm tumidâ, plicis quatuor, quarum duabus anticis magnis, sub-quadratis; labio externo crasso intùs irregulariter dentato, extùs roseo, validè varicoso, ad marginem sub-canalifero.

Judging from the worn shell in the collection of Mr. Bell, the species must have been beautiful, the colour being pale lilac, with a broad band of darker tint, and the outer lip a delicate rose. This shell differs from *M. L'argillieri* in having four folds on the columella, and in the different form of the columellar swelling at the posterior end.

107. *MARGINELLA L'ARGILLIERI* (pl. lxxviii. f. 178, 179, 180.), *Kiener* Sp. gen. coq. viv. *Marginella* p. 43.

*M. ovali*, pallidè rubrâ, obscurè trifasciatâ, albo maculatâ; spirâ celatâ, umbilicatâ; aperturâ spiram superante; columellâ posticè in varicem validem spiram superante elevatâ, anticè callosâ, plicis tribus quarum anticâ magnâ maximâ, penè duplicatâ; labio externo crasso, intùs irregulariter crenato, albo, extùs aurantio, validè varicoso, canalifero.

Oval, pale, reddish, with obscure bands and white spots. The outer and columellar lips are both extended beyond the spire as in the Cowries, and the latter forms a raised edge near the mouth, then there are two small folds and one large thick one from which a small tooth is parted. The outer lip is jagged on the inner edge, it is externally orange, with a groove behind its reflected edge. The pale variety, f. 178, is from Mr. Bell's collection, the others are Mr. Cuming's specimens from Bahia, Brazil.

108. *MARGINELLA CLANDESTINA* (pl. lxxviii. f. 216.), *Brown*.

*M. testâ* minutâ, ovato-globulosâ, lævi, pellucidâ, cinereâ; spirâ brevissimâ, labio externo vix denticulato; columellâ triplicatâ.

Very minute, pyriform, globose; with a very short spire, the outer lip very slightly crenulated, three small folds on the columella. From the coast of Sicily.

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# MARGINELLA,

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## MONOGRAPH OF THE GENUS

## CYMBA.

As described by W. J. Broderip, Esq., for the 'Species Conchyliorum'.

*Char. Gen.* "Testa lævis, admodum ventricosa. Epidermis lævis, fusca, tegmine quasi vitreo partim vel omnino obducta. Apex rudis. Spira brevissima. Columella curva, 2-4-plicata, plicis magnis, acutis. Labium externum hand reflexum. Basis profundè emarginata. Apertura hians.

"Caput grande, planum, tentaculis remotis, oculis pone tentacula positis. Pallium magnum. Pes maximus. Operculum nullum. Animal carnivorum.

"Marinum in calidioribus mundi veteris regionibus.

"The genus *Cymba* seems to form a natural group of testaceous Mollusca, the shells of which are marked by very strong characters; for these are ventricose, sombre, and for the most part, uniform in colour, and the apex of the spire is so rudely fashioned, that in the greater part of the species, it may be said to be almost shapeless. The shells are covered with a smooth, brown epidermis, which is, in adult individuals, more or less coated (in some instances entirely) with a vitreous covering or enamel-like glaze, probably secreted by the mantle. The columella is curved, and the base deeply emarginate. The food of these marine Trachelipoda consists of animal substances; they are inhabitants of warm climates, and there is no direct evidence that one of the genus has been found in the New World, if we confine the meaning of that term to America and its Islands; neither is the author aware that any of the shells of this genus have been found in a fossil state."

1. CYMBA NEPTUNI (pl. lxxx. f. 14, 17, 23.) *Voluta* Neptuni, *Gmel.*

"C. testâ obovatâ, ventricoso-tumidâ, rufo-fuscescente, anfractus basalis limbo apicem oblitteratum prætereunte, carinato, subreflexo; columellâ 4-plicatâ.

"Shell obovate, tumid, ventricose, of a brownish red, covered with a strong brown epidermis, over which an enamel-like glaze is

extended from the pillar over about a fourth part of the shell, leaving the epidermis of the back uncoated. In full grown specimens the spire and apex are entirely concealed, and the upper border of the body whorl, which is carinated and somewhat reflexed, overhangs both, so as to form an open, somewhat round concavity. The pillar is four-plaited.

"In younger individuals (Fig. 17.) and especially in those lately produced, the shell is thin, of a brownish red mottled with white, and the rude apex of the spire appears entirely uncovered.

"From Africa, near the shore".

2. *CYMBA TRITONIS* (pl. lxxix. f. 8. lxxx. f. 25.) *Brod. Sp. Conch.*

"C. testâ ovato-tumidâ, elongatâ, pallente, anfractus basalis limbo apicem rotundum supereminente subreflexo; columellâ triplicatâ.

"Shell ovate, tumid, elongated, pale-brown or whitish, covered with a brownish epidermis, over which an enamel-like glaze extends from the pillar about as far as it does in *Cymba Neptuni*. The rounded apex of the spire in full grown individuals is very nearly concealed, and is over-hung by the border of the spire and body-whorl, so as to present the appearance of a shallow winding excavation, (at the bottom of which the tip of the apex may be discerned,) differing entirely in character from that which is observed in *Cymba Neptuni*, the aperture is much less patulous; and the whole shell is more symmetrical and melon-shaped".

From Africa.

3. *CYMBA PATULA* (pl. lxxix. f. 7.) *Brod. Sp. Conch.*

"C. testâ tumidâ, labium versus gibbâ, brunneo-rubente, anfractus basalis limbo excavato subreflexo, apicem subrotundum exsertum vix prætereunte; columellâ 4-plicatâ; aperturâ valdè patulâ.

"Shell tumid, gibbous towards the outer lip, brownish red, covered with a brownish epidermis, partially coated, as in the last species, with an enamel-like glaze. The spire is excavated and open, the rounded apex partly apparent, and the upper border of the body-whorl carinated, and somewhat reflected. The pillar, which has four plaits, is straighter than that of *Cymba Neptuni* and *Cymba Tritonis*, and the aperture from the gibbous extension of the outer lip is very wide. The shells of all the individuals of this species seen by the author, have the appearance of being full-grown, and are very much inferior in size to the two species last described".

From the African Ocean, near the shores.

4. *CYMBA PROBOSCIDALIS* (pl. lxxix. f. 2. pl. lxxx. f. 22, 27.)  
*Brod. Sp. Conch.*

"C. testâ elongatâ, ventricosu-cylindraceâ, pallidè fulvâ, anfractus basalis limbo apicem oblitteratum prætereunte, producto, patulo, carinato, subreflexo; columellâ 4-plicatâ.

"In ætate provectâ, testâ tegmine vitreo penitus adoptera. Apex in junioribus exsertus subglandiformis.

"Shell elongated, somewhat cylindrical, but ventricose towards the middle, reddish yellow, which becomes paler in full grown specimens, covered with a dark brown epidermis, which is entirely coated in adults with the enamel-like glaze. The spire and apex are almost entirely obliterated in full grown individuals, and the reflected upper border of the body-whorl exposes a wide, somewhat excavated, snout-like area, from which the species obtains its name. The pillar has four plaits, the last being comparatively small. The shell grows to a large size. The author possesses a shell of this species, to which numerous *Coronulæ* (*Chelonobiæ*, Leach,) and *Crepidulæ* are attached; the animal has buried the majority of these adhesions under the thickest coat of enamel-like glaze hitherto observed on the shell of the species".

African Ocean, near the shores.

5. *CYMBA PORCINA* (pl. lxxix. f. 1, 5, 9, 16, 18. pl. lxxx. f. 20.) *Lam. Anim. s. vert.*

"C. testâ subcylindricâ pallidè fuscâ; anfractus basalis limbo apicem subobsoletum vix supereminente, patulo, tantum non plano, subcarinato; columellâ biplicatâ.

"Shell subcylindrical, whitish, covered with a thin ash-coloured epidermis, which is coated by a silvery enamel-like pellicle, extending over about  $\frac{2}{3}$  of the shell. The apex is more visible than in *Cymba proboscidalis*, but the spire is entirely concealed. The upper border of the body-whorl is less reflexed than it is in that shell, and the area, though very open, is less excavated. In fine specimens the aperture is of a rich brown colour. The plaits on the pillar are only two, the shell is very uniform in size to that of *Cymba proboscidalis*".

Senegal.

6. *CYMBA RUBIGINOSA* (pl. lxxix. f. 12, 13. pl. lxxx. f. 19.)  
*Swain. Exotic Conch.*

"C. testâ elongatâ, subcylindricâ, pallidâ, anfractus limbo



apicem suboblitteratum supereminente; columellâ triplicatâ; fauce rubiginosâ.

"Shell elongated, irregularly cylindrical, pale, (except on and near the pillar and in the aperture, where it is of a rich rusty brown) covered with a pale brown epidermis, which is entirely coated in old individuals with a brown enamel-like glaze. The apex of the shell is almost obliterated, and the border of the spire and body-whorl, which is less sharp than in the species described, is produced somewhat beyond it, exposing a rounded excavated area, deeper, but much more contracted than that of the shell of *Cymba porcina*. The pillar is three-plaited".

Australian Seas.

7. CYMBA OLLA (pl. lxxix. f. 3, 4, 11.) *Linn. Syst. Nat.*

"C. testâ, ventricosâ, pallidè luteo-fulvâ; spirâ brevi, canaliculatâ, apice subconico, exserto; columellâ 2-plicatâ.

"Shell ovate, ventricose, pale fulvous, covered with a thin pale brown epidermis, which is coated with an enamel-like glaze from near the pillar to about two-thirds of the shell. The subconical apex is exposed as well as the spire, which last, together with the upper part of the body-whorl, is rounded and deeply channelled. Pillar with two-plaits".

Mediterranean.

8. CYMBA GRACILIS (pl. lxxix. f. 15. pl. lxxx. f. 24.) *Brod. Sp. Conch.*

"C. testâ, subcylindricâ, albo rufoque nebulosâ; spirâ sub-excavatâ, apice subglandiformi conspicuo; labii, limbo spiram versus inflexo; columellâ 4-plicatâ.

"Shell subcylindrical, clouded with white and reddish. The spire somewhat excavated, and the subglandiform apex conspicuous. The area much less, and the channelling much shallower than in *C. cymbium*; the pillar, which has four plaits, much straighter, the aperture narrower, and the whole shell more slender and symmetrical. The sharp upper border of the lip is very much inflected towards the spire, and the shell is covered with a thin brown epidermis, which is coated with the enamel-like glaze for about one third of the shell, beginning near the pillar. There is reason to conclude that in very old specimens this coating extends much further".

9. CYMBA CYMBIUM (pl. lxxix. f. 6, 10. pl. lxxx. f. 21, 26.) *Linn. et auct.*

*C. testâ subovatâ, albo rufoque marmoratâ; spirâ canaliculatâ, carinatâ, apice subglandiformi, conspicuo; columellâ 3-plicatâ.*

"Shell irregularly ovate, marbled with white and brownish red, covered with a thin brown epidermis, which is coated for about one third of the shell with the enamel-like glaze, which takes its commencement near the pillar. The spire is deeply channelled and carinated, exposing the subglandiform apex, and forming with the subreflected sharp upper border of the body-whorl, a wide spiral excavation. The upper edge of the outer lip recedes from the spire. The pillar, which is very much curved, has three plaits, and is bordered on the basal half, with a rich chesnut longitudinal band."

From Senegal.

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## CYMBA.

### LIST OF FIGURES, IN PLATES LXXIX. AND LXXX.

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Fig.

- 1, 5, 9, 16, 18, 20. *C. porcina*, sp. 5.
  - 2, 22, 27. — *proboscidalis*, sp. 4.
  - 3, 4, 11. — *olla*, sp. 7.
  - 6, 10, 21, 26. — *cymbium*, sp. 9.
  - 7. — *patula*, sp. 3.
  - 8, 25. — *Tritonis*, sp. 2.
  - 12, 13, 19. — *rubiginosa*, sp. 6.
  - 14, 17, 23. — *Neptuni*, sp. 1.
  - 15. 24. — *gracilis*, sp. 8.
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## MONOGRAPH OF THE GENUS

## MELO.

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As described by W. J. Broderip, Esq., for the "Species Conchyliorum", Part 2, unpublished.

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*Char. Gen.* "Testa ventricosa, lævis, ut plurimum colore vario. Epidermis lævis viridi-fusca. Apex spiralis papillaris. Spira brevis. Columella vix recta, 3-4-plicata, plicis magnis, acutis. Labrum subacutum. Basis profunde emarginata. Apertura hians. Operculum nullum. Caput grande, planum; tentaculis lateralibus remotis, ocellis pone tentacula positis magnis, branchiæ satis magnæ, dextra majore.

"Pallium mediocre. Pes maximus ovalis.

"Animal carnivorum.

"Marinum in calidioribus mundi veteris regionibus præsertim ad Novam Hollandeam.

"The apex or nucleus which in the shell of the sub-genus *Cymba* was almost a shapeless mass, takes in that of *Melo* a well fashioned and spiral form; with this papillary summit we have the vivid and elegant colouring which is its almost constant companion. The suture of the spire no longer rude, is either neatly laid around the apex so as to touch it, and in some instances overwrap it, or as in the coronated section is free, slanting out from the apex and adorned with a diadem of vaulted spines. The shell of *Melo* is ventricose light melon-shaped. It is generally marked with a well-defined variety of colour and protected by a smooth greenish brown epidermis which in some species is very thin but always wants the glazed coating of *Cymba*. The papillary nucleus which never increases after birth, almost presents the appearance of a piece of workmanship from the turning lathe. The pillar, which is rarely straight, has from three to four plates sharp and well-developed. The edge of the outer lip is generally somewhat sharp, the base is very deeply notched and the aperture, which is unprotected by any operculum is very wide."

1. MELO INDICUS (pl. lxxxi. f. 1, 2, 3, 4, 5.) *Voluta melo*, *Solander*, *Voluta*, *Gmel.*

“M. testâ valdè ventricosâ, ovato-globosâ, flavâ vel rubro-aurantiacâ, maculis strigisque castaneis sub-triseriatim tessellatâ; spirâ occultatâ, columellâ quadriplicatâ, epidermide viridi-fuscâ, tenui; long. 6–9. lat.  $3\frac{1}{2}$ –8. poll.

“Shell very ventricose, ovate, globose, yellow, yellowish red, or ruddy-orange, tessellated with chesnut spots or stripes disposed for the most part in transverse lines which gird the body-whorl. The spire is entirely covered in full grown shells, and in old individuals, so is the apex, which in young shells is always bare and prominent.”

Indian Ocean.

2. MELO TESSELLATUS (pl. lxxxi. f. 6, 7, 8.) *Voluta tessellata*, *Lam.*

“M. testâ ventricosâ, albido-sulphureâ, zonis tribus vel duabus castaneis tessellatis; spinis decumbentibus, apicem versus convergentibus; epidermide viridi-fuscâ, tenui; long. 6. lat. 4. poll.

“Shell ventricose, of a straw or sulphurous colour, banded with three and sometimes two zones of tessellated spots. The spines which are broad at the base and decumbent, converge towards the apex, the tip only of which in fine specimens rises above them. Epidermis greenish brown and thin. The immaculate variety is more frequently found in a fine and sound state. In the beautiful figure by Swainson a few spots mark the transition from the youth to the colourless state. I have both the varieties in almost every stage of transition, but even in those which are entirely spotless, an examination of the first volution of the spire at the base of the apex or nucleus will shew, that, in its youth, the shell was tessellated with spots, though, as it advanced in growth, it ceased to secrete them”.

3. MELO ÆTHIOPICA (pl. lxxxi. f. 9. pl. lxxxii. f. 13, 14, 19.) *Voluta Æthiopica*, *Linn.*

“M. testâ obovatâ, ventricosâ, cinnamomeo-lutescente, spinis brevibus, suberectis, columellâ, 3–4-plicatâ; epidermide tenui, virescente; long. 6–12. lat. 4–8. poll.

“Labro supernè sub-angulato, in senioribus apicem spiræ trans-eunte.

“Shell obovate, ventricose, of a yellowish cinnamon colour, the spines short, frequent, suberect; pillar with from three to four plaits; epidermis thin, of a greenish brown”.



4. MELO NAUTICUS (pl. lxxxii. f. 10, 11, 12.) *Voluta nautica*, *Lam.*

"M. testâ ventricosâ, tumidâ, subglobosâ, cinnamomeo-fulvâ; spinis crebris, decumbentibus, inflexis, apicem versus convergentibus, columellâ 3-4-plicatâ; epidermide tenui, virescente, long. 6-8. lat.  $4\frac{1}{2}$ . poll.

"Shell ventricose, tumid, of a yellowish cinnamon colour, the spines numerous, close set, decumbent, converging towards the apex; pillar with from three to four plates; epidermis thin, greenish.

"It is possible that this may be only a variety of *Melo Ethiopius*".

5. MELO DIADEMA (pl. lxxxii. f. 16, 17, 20.) *Voluta diadema*, *Lam.*

"M. testâ valdè ventricosâ, fulvo vel castaneo, interdum albomarmoratâ, spinis brevibus rarioribus; labro supernè angulato; columellâ triplicatâ; epidermide virescente tenui; long. 6-13. lat. 4-8. poll.

"Shell very ventricose, of a tawny-orange or chesnut colour, often marbled with white; the spines short and not frequent; the whorl of the spire angulated as well as the termination of the outer lip. Pillar with three plaits. Epidermis thin, greenish.

"This shell varies extremely both in size and colour. Though the very young shells of each variety are more or less marbled with white. The animal ceases to secrete spines as it advances in growth".

Asia.

6. MELO ARMATUS (pl. lxxxii. f. 15. pl. lxxxiii. f. 21, 22.) *Voluta armata*, *Lam.*

"M. testâ ventricosâ, ovatâ, supernè coarctatâ, luteo-aurantiacâ albo-marmoratâ; spinis longis subrectis; columellâ triplicatâ; epidermide viridi-fuscâ tenui; long. 7. lat. 4. poll.

Shell ventricose, ovate, narrowed towards the spire, of a saffron orange or chesnut colour, marbled with white. The spines are long and generally nearly straight, though they are sometimes a little curved. Plaits on the pillar three, epidermis greenish brown.

"The spines are longer less distant and more numerous than in *M. diadema*. They are continued to the edge of the last whorl. The shell is of far smaller volume than *M. diadema* and measures less across the spines."

Asia.

7. *MELO MILTONIS* (pl. lxxxiii. f. 24, 25.), *Gray*, in Griffiths' 'Animal Kingdom' vol. xii. t. 29. *Melo cylindratus*, *Brod.*

"M. testâ cylindratâ, tenui, albidâ vel subroseâ, maculis strigisque castaneis angulatis pictâ; spirâ sub-productâ; spinis brevibus, basi latis apicem versus incurvis; columellâ triplicatâ; epidermide tenuissimâ subvirescente; long. 7. lat  $3\frac{1}{8}$ . poll.

"Shell sub-cylindrical, thin, whitish or pinkish, boldly painted with angulated stripes and spots, which have sometimes a flamy or lightening-like character in their shape. The spire, somewhat produced, is adorned with shortish sharp spines, broad at their bases and incurved towards the apex at their points. The pillar is three-plaited, though there is sometimes a trace of a fourth plait, as is the case in many species. The junction of the upper extremity of the outer lip with the body of the shell, is at a lower point than any of the preceding species, and hence we find the spire more produced."

Swan River, New Holland.

8. *MELO BRODERIPHI* (pl. lxxxiii. f. 26, 27.), *Gray* (*Voluta*) Griffiths' 'Anim. Kingdom', vol. xii. t. 26. *M. regius*, *Brod.*

"M. testâ ventricosissimâ, tumidâ, albidâ strigis maculisque rubro-castaneis inscriptâ; spinis brevibus, valdè apertis, frequentissimis; columellâ quadriplicatâ, spirâ productiori; epidermide sub-fuscâ, tenui; long. 8-14 $\frac{1}{2}$  poll. lat. 5 $\frac{1}{2}$ -7 $\frac{1}{2}$  poll.

"Shell very ventricose, tumid, whitish, inscribed with stripes and spots of a reddish chesnut colour. Spines short, very open and very thickly set. Pillar with four plaits. Spire produced. Epidermis brownish, thin. This species varies much in size and colour, and when very old seems to lose the power of secreting spines. My very large specimen of the bifasciated variety, which is fourteen inches and a half long, ten and half broad, and seven and a half in diameter, measured from the upper to the lower side, was found alive at Manilla, by Mr. J. K. Smith; and  $\frac{2}{3}$  do. of the superior carinated edge of the body-whorl are unarmed with spines. In this specimen the spire is very well shown, and indeed it is more produced in this species than in any other."

Manilla.

9. *MELO MUCRONATUS* (pl. lxxxiii. f. 23-28.).

"M. testâ ovato-oblongâ, admodum ventricosâ, luteâ vel castaneâ albo-marmoratâ; spinis magnis, latis, apertis; columellâ triplicatâ; epidermide fuscâ; aperturâ latâ, aurantiacâ; long. 13. lat. 9. poll.

"Shell ovate, oblong, considerably ventricose, orange, saffron colour or chesnut, marbled with white. Spines broad, open, and somewhat distant. Pillar with three plaits. Epidermis brown. Aperture wide, of an orange colour."

Moreton Bay, in New Holland.

10. *MELO UMBILICATUS* (pl. lxxxii. f. 18. pl. lxxxiii. f. 29, 30.), *Brod.*

"M. testâ ventricosissimâ, subcompressâ, flavâ albo-marmoratâ, vel albâ flavo reticulatâ, bifasciatâ, fasciis transversis nigro-castaneis, subtessellatis; spirâ apicem longè prætereunte, spinis magnis, raris; aperturâ latissimâ; columellâ quaduplicatâ; epidermide pallidè virescente, tenuissimâ; long.  $12\frac{1}{2}$ . lat. 9. poll.

"Shell very ventricose, somewhat compressed, yellow or reddish-yellow, marbled with white, or white reticulated with the same colours, girt with two narrow, blackish chesnut, somewhat tessellated bands. The spire projects far beyond the apex, which in old specimens is seen as it were at the bottom of an excavation, while in very young shells it projects beyond the spire. The spines are large, long and somewhat distant. The aperture, which is of a light yellow, or very pale orange, is very wide, measuring upwards of six inches and a half in old individuals. The pillar has four plaits, in some very young shells, and in all the old ones which I have seen; those of intermediate growth have generally but three. As the shell increases in growth the colours become less vivid, and the bands more interrupted, till at last both are almost lost."

Moreton Bay, New Holland.

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#### LIST OF FIGURES IN PLATES LXXXI. TO LXXXIII.

- 1, 2, 3, 4, 5. *M. Indicus*, sp. 1.
  - 6, 7, 8. — *tessellatus*, sp. 2.
  - 9, 13, 14, 19. — *Æthopicus*, sp. 3.
  - 10, 11, 12. — *nauticus*, sp. 4.
  - 15, 21, 22. — *armatus*, sp. 6.
  - 16, 17, 20. — *diadema*, sp. 5.
  - 18, 29, 30. — *umbilicatus*, sp. 10.
  - 23, 28. — *mucronatus*, sp. 9.
  - 24, 25. — *Miltonis*, sp. 7.
  - 26, 27. — *Broderipii*, sp. 8.
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## MONOGRAPH OF THE GENUS

### SPONDYLUS.

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*Class*, Conchifera.    *Order*, Monomyaria.    *Fam.* Pectinides.

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*Gen. Char.* Testa inæqualvis, auriculata, irregulariter costata et foliacea; valvâ inferiori affixâ, areâ cardinali triangulari ligamentiferâ; cartilagine resiliendi in foveam areæ cardinalis dispositâ; dentibus duo validis in utroque valvâ.

The *Spondyli* are inæquivalve, auriculated, irregularly foliaceous, ribbed,\* and generally spinous or foliaceous. The lower valve, which has an external, triangular area, is attached to sub-marine substances by a greater or less portion of its surface. The elastic cartilage of the hinge is placed in a linear groove in the centre of the cardinal area, which terminates in a rounded spoon-shaped process within. There are two teeth, locking into corresponding cavities in each valve.

The younger portion of the shell generally takes its form from the substance to which it is attached, and it is not until the lower valve in its growth parts from that substance that the true shape can be known. If this takes place at an early period, the shell is regular, and generally of an obliquely oval form; but if, as in some cases, the whole lower surface is in contact with the rock or madreporæ, it is liable to every kind of variation. In some species there appears to be a tendency to grow more freely than in others, as in *S. regius*, *S. Cumingii*, and more particularly in *S. imperialis*, in which the point of attachment is scarcely perceptible. The spines, or scales, or imbrications, are also much influenced by the circumstances and position in which the growth has taken place, many shells being spinous at one period of their development, and foliaceous at another. In the lower valve, where the surface ceases its contact with the rock, there are frequently thrown out broad foliations, apparently for the purpose of reaching it, and rendering the position of the mollusc more firmly secure. These variations are so perplexing and complicated, that it is quite impossible, with any degree of confidence to define the species, or to fix their limits



by permanent characters. The following must be taken as the nearest approximation which the variations above described will admit.

1. SPONDYLUS AMERICANUS (pl. lxxxviii. f. 42. pl. lxxxix. f. 64, 65.), *Lam. Anim. s. vert.* vol. vi. p. 188. *S. arachnoides*, *Lam.* *S. longispina*, *Lam.* *S. avicularis*, *Lam.*, et *S. striato-spinosus*, *Chemn.*, inclusis.

*S. testâ* subrotundatâ, crassâ, asperâ; umbone valvæ inferiori plerumque producto; areâ cardinali magnâ; costis 6 principalibus; squamis subdistantibus, elongatis, erectiusculis, plerumque palmatis, lævibus subtùs sulcatis; costis interstitialibus spinis acutis ornatis; valvâ inferiori plerumque foliaceis; colore pallidè fulvo, prope umbones rubro.

This well-known species being somewhat variable in the shape and disposition of its spines, has occasioned Lamarek and others to describe varieties under the name given above. His *S. arachnoides* and his *S. longispina*, are both varieties with lengthened spines, which are narrower than in others. Between each of the six principal rows of lengthened, and somewhat erect, palmated scales, there are in some specimens three or four rows of spines. In *S. striato-spinosus* of Chemn., these intermediate spines are fully developed, while the larger scales are nearly obsolete. From America.

2. SPONDYLUS GÆDEROPUS (pl. lxxxvii. f. 29. pl. lxxxviii. f. 41.), *Linn. Syst. Nat.*

*S. testâ* plerumque tenui, subrotundatâ, vix costatâ, laminis in seriebus 6 ad 9 dispositis, erectiusculis, purpureis, lævibus, ad terminas complanatis; interstitiis creberrime spinis minutis, seriatim ornatis. Valvâ inferiori foliaceâ, plerumque albâ, vel pallidè croceâ.

The spatulæ of the true *Spondylus Gæderopus* are somewhat distantly arranged in eight or nine rows. They are for the most part erect, flattened at the extremity, and grooved underneath. The interstices are crowded with minute pointed prickles. The laminæ and spines of the upper valve are of a purple colour, which is strengthened at the roots. The laminæ of the lower valve are generally broad and white, or nearly so. Figure 29 represents the more common variety, in which the upper valve has a general purple aspect.

From the Mediterranean. Mr. Cuming's specimens are from Malta.

3. SPONDYLUS ACULEATUS (pl. lxxxv. f. 11, 13.), *Chemn.* t. 44. f. 460. *S. dentatus*, *Chemn.* pl. 25. f. 1. pl. 27. f. 2.

*S. testâ* ovali, purpureâ vel fuscâ; costis 10 ad 11, spinis brevibus numerosis, aculeatis, erectiusculis, albis; interstitiis minutè spinosis.

Of an oval form, with ten or twelve rows of white, short, rather erect, numerous thick spines, upon a purple or brown ground, covered with very fine spines.

From the Mauritius.

4. SPONDYLUS PETROSELINUM (pl. lxxxiv. f. 6, 7, 8, 9, 10. pl. lxxxviii. f. 49.), *Chemn.* vol. vii. t. 46. f. 472, 473. *S. costatus*, *Lam.*, Knorr. vergn. vol. i. t. 9. f. a. *S. multilamellatus*, *Lam.*?

*S. testâ* ovali, lineatim purpureâ, vel fuscâ, prope umbones variegatâ; costis 6 validis, albis; squamis erectiusculis, arcuatis, plicato-palmatis; interstitiis costis duobus vel tribus validis, plus minusvè divisis, nonnunquam scabriusculis.

Figures 6, 8, and 10 probably represent *S. costatus* of Lamarck. Fig. 9 is from a shell exactly resembling *S. Petroselium*, as represented by fig. 472, 473 of Chemnitz. From the latter, in which the grooves between the intermediate ribs are partly filled up by laminæ, and the palmated scales are nearly obsolete, to the former, in which the ribs and spatulæ are fully developed, we possess specimens presenting an unbroken series of gradations, rendering it impossible to separate them. Lamarck refers to the same figures in Chemnitz (472, 473), first, for *S. multilamellatus*, his description of which does not agree with them, and afterwards for his *S. longispina*, with which they agree still less. The orange variety is represented by the favour of Mr. Norris, from whom we also received (when too late) a much finer specimen of the typical variety than our figure (6) represents.

Fig. 6 is from the Mauritius. Mr. Cuming collected var. f. 7 at the Isle of Ticao, Philippines.

5. SPONDYLUS CROCEUS (pl. lxxxvii. f. 31.), *Chemn.* vol. vii. t. 45. f. 163.

*S. testâ* ovali, crocê, costis quinque, spinis distantibus crassiusculis; interstitiis irregulariter costatis.

This species has five or six ribs, with a few thick spines on each.

The interstices are smoothly and irregularly ribbed. The colour is uniformly orange.

West Indies.

6. *SPONDYLUS LONGITUDINALIS* (pl. lxxxvi. f. 23, 25, pl. lxxxix. f. 56.), *Lam. Anim. s. vert.* vol. vi. p. 191. *S. multilamellatus*, *Lam. Chénu. Illust. conch.*

*S. testâ* plerumque ovali, costatâ; costis principalibus 5 ad 8 creberrimè imbricatis et aculeatis squamis erectiusculis numerosis planulatis et truncatis; colore vario plus minusve croceo.

The specimens of this very variable species, of which fig. 25 may be considered typical, correspond fairly with the shells in Lamarck's collection, as figured by Chénu in the 'Illust. conch.' When in perfect condition, and fully developed, the ribs are numerous, and sharply imbricated; from five to eight of them are closely studded with rather erect, flattened, smooth scales, slightly hollowed underneath.

All the specimens are from the West Indies, excepting the last mentioned, which is from China.

7. *SPONDYLUS DIGITATUS* (pl. lxxxix. f. 58, 59.), *nobis*, *Proc. Zool. Soc.*, May, 1847.

*S. testâ* subrotundatâ, tenui, costatâ; costis 6 ad 8 principalibus, vix elevatis, squamis rectiusculis, arcuatis, ad terminos palmatis, aculeatim divis, interstitiis spinosis; colore fusco, vel rubro, vel purpureo, ad umbones rubro variegato.

The shells here described may possibly be only young specimens of *S. longitudinalis*, with the scales developed in a remarkable manner; their peculiarity consists in the beautifully branched and digitated palmations, which terminate the arched outstanding scales.

Taken from ships' bottoms, at Bermudas. In H. Cuming's collection.

8. *SPONDYLUS LINGUA-FELIS* (pl. lxxxviii. f. 50.), *Sow.*, *Jun. Proc. Zool. Soc.*, May, 1847.

*S. testâ* ovali, crassâ, fuscâ, subtùs croceâ; areâ cardinali et auriculis magnis; costis numerosis vix elevatis, spinis brevibus, æqualibus, numerosis, armatis.

A much more solid shell than *S. asperimus*, with large hinge, and of an uniform dark brown colour, which is shown in the interior by a strongly marked brown border. The shell is covered by nearly equal ribs, which are armed by short thick numerous

prickles. The interstices are smooth. In the collection of Mr. Gruner, Bremen. Locality unknown.

9. SPONDYLUS TENUISPINOSUS (pl. lxxxvii. f. 37.), *nobis*.

S. testâ ovali, tenui; costis principalibus 8; spinis elongatis, tenuis, erectis, numerosis; spinis interstitialibus minutè spinosis, interstitiis minutè imbricatis; laminis valvæ inferiori elegantissimè foliaceis; colore pallidè cinereo, prope umbonem rubro variegato, valvâ inferiori albâ, prope umbonem flavidâ, rubro radiatâ.

The only specimens of this elegant shell are in the collection of Mr. Cuming. The species is distinguished by the thin, sharp, erect white spines, which ornament the numerous ribs. The upper valves are of a pale ashy colour, variegated with red near the umbo, and the under valve is white with beautifully foliated laminæ, and a few graceful spines.

Isle of Zebu, Philippines; Cuming.

10. SPONDYLUS ASPERRIMUS (pl. lxxxvii. f. 38.), Sow., Jun., Proc. Zool. Soc., May, 1847.

S. testâ subrotundatâ; costis numerosis vix elevatis, subequalibus; aculeis brevibus, erectis, creberrimis, subtùs canaliculatis; interstitiis scabriusculis et spinosis; colore valvæ superiori fusco, prope umbonem variegato, valvæ inferiori croceo.

This shell is remarkable for the numerous, nearly equal ribs, which are armed with very short, erect, equidistant spines. The shell is in Mr. Cuming's collection.

11. SPONDYLUS SPATHULIFERUS (pl. lxxxvi. f. 26. pl. lxxxix. f. 61.), *Lam. anim. s. vert. vol. vi. (synom. exclus.)*, var. *purpureâ*, S. *violaceus*, *Lam.*

S. testâ ovali ventricosâ, costis principalibus 6 validis; squamis distantibus, ad basin angustibus, ad terminos arcuatis, palmatis, subdivisis, subtùs sulcatis; interstitiis quinque-sulcatis, sulcis imbricatis, spinis parvis, vel squamis, ornatis; colore purpureo, vel rubro, vel fusco, plerumque subtùs croceo tincto, prope umbones rubro variegato. Variat squamis flavidis.

The scales of the six principal ribs are narrow and erect at the base, and at the termination slightly arched, flattened, and palmated. They are few in number, and the interstitial ribs generally have a few smaller and more pointed scales. The colour, whether brown or purple, is generally dark, and uniform, presenting a well-defined border in the interior. The umbones are variegated with red, and the under side of the shell is generally more or less tinged with saffron. The figure in Plate lxxxix may be



regarded as typical. Fig. 26 is a fine shell, with yellow scales, in the collection of Mr. Norris, and Fig. 24 is from a specimen in which the scales seem to be accidentally aculeated.

This species is given on the authority of those who have seen the specimens in Lamarck's collection, and that of the museum at Paris, although Lamarck refers to figures in Chemnitz representing another shell, which Chénu calls *S. Lamarckii*.

From the West Indies.

12. SPONDYLUS MICROLEPOS (pl. 88. f. 46.), *Lam.*, Anim. s. vert. vol. vi. p. 192.

*S.* "testâ utrinque rubrâ, longitudinaliter costatâ et striatâ; costis 5 ad 6 squamiferis, squamis ligulatis truncatis exiguis."

We are favoured with the shell from China, represented, fig. 46, by Mr. Hanley, and think it may probably be the species to which Lamarck refers. The five or six principal ribs are notched by imbricated rudimentary scales, which near the margin present the narrow ligulate character above described. The intermediate ribs numerous and minutely imbricated. There is a yellow shell in Mr. Cuming's collection, presenting similar characteristics, and agreeing equally well at the same time, with the fig. in 'Knorr', part 6. pl. 13. f. 3. referred to it by Lamarck. The shell described by Lamarck is red.

13. SPONDYLUS PICTORUM (pl. lxxxvi. f. 28. pl. lxxxv. f. 17. pl. lxxxviii. f. 45.), *Chemn.* Tab. 69. lit. E. F. *Spondylus crassissquama*, *Lam.* Anim. s. vert. vol. vi. p. 191. *S. princeps*, *Brod.* Proc. Zool. Soc., 1833, p. 4. *S. dubius*, *Brod.* Proc. Zool. Soc. 1833, p. 4.

*S.* testâ ponderosâ, subrotundatâ; cardine magno; limbo profundè plicato; costis principalibus 6, validis; squamis crassis, distantibus sub-depressis, ad terminos subcomplanatis, paulûlum sulcatis; costis interstitialibus 3 ad 6, spinis crassis brevibus, vel squamis extantibus, sub-palmatis, inæqualibus; colore externè et ad marginem internè, rubro; variat purpureo, squamis aurantiis.

A ponderous shell, of a deep red or orange-colour, with large hinge and six principal ribs, with thick scales; when young, it has three interstitial ribs, which increase in number with the growth, so that in the full-grown shell there are seven between each of the principal ribs. The intermediate scales are few at an early growth, but increase in frequency, and they are more aculeate than the others. Mr. Cuming possesses a very young shell, in which the earliest scales are beautifully vaulted. *S. dubius*, *Brod.*, is a variety

in which the interstices are more distinctly striated than in those which Mr. Broderip has named *S. princeps*. By the rule of priority, both names, together with Lamarck's *S. crassisquama*, given on the authority of specimens so named in Lamarck's collection, must give place to that which we have adopted, on an examination of the figures in Chemnitz. Mr. Cuming's specimens are from the Isle of Plata, West Columbia, and from the Gulf of Tehuan. Mr. Sowerby possesses a small shell, which appears to be a variety of this, but which may be distinct, from China.

14. SPONDYLUS LEUCACANTHA (pl. lxxxvii. f. 35, 36.), *Brod. Proc. Zool. Soc.*, 1833, p. 5.

*S. testâ solidâ, ventricosâ, ovali; costis 6 principalibus, squamis elongatis subarcuatis, lævibus, angustis, subtùs concavis, ad terminum subtruncatis; interstitiis minutissimè imbricatim striatis, costis vix elevatis, tribus (mediâ maximâ) aculeatis, regularibus, subarcuatis, ornatis; colore croceo vel rubro; squamis albis.*

This elegant species is named from the beautifully white scales standing out from an uniform ground of bright orange or scarlet. The shell is solid, with six principal ribs, armed with strong, even, and rather lengthened scales, which are slightly flattened and depressed, but not spread at the ends. Between each rib there are three rows of scales, some of which are pointed at the ends.

Collected by Mr. Cuming at the Island of Plata.

15. SPONDYLUS UNICOLOR (pl. lxxxv. f. 19.), *Sowerby, Proc. Zool. Soc.* May, 1847.

*S. testâ solidâ, obliquè ovali, rubro violascente; costis 6 principalibus, squamis crassis, arcuatis, subtùs concavis, paululùm palmatis, propè marginem numerosis; costis interstitialibus, spinis crassis, brevibus, armatis; inter costas sulcis nonnullis.*

Solid, obliquely oval, of an uniform purplish-red colour, which is shown in the interior by a strongly defined, deep red margin round a white centre. The five or six most prominent ribs are ornamented by strong, arched, hollow spathulæ, which are slightly depressed and palmated at the end. The intermediate ribs are studded with short thick spines near the margin. Between some of the ribs there is occasionally a deep groove; in the thickness and arrangement of the scales and ribs, and in the solidity of the shell, it resembles *S. pictorum*, from which it differs principally in the more tumid and obliquely oval form of the fully developed specimens. After figuring M. Gruner's specimen, we have met

with a much more finely coloured specimen in the hands of Mr. Sowerby, sen., which fully confirms our description. The locality is unknown.

16. SPONDYLUS IMPERIALIS (pl. 88. f. 43, 44.), *Chénu*, *Illust. conch.* p. 6. pl. 26. f. 2, 3.

S. testâ regulari ovali, subdepressâ; areâ cardinali parvâ; costis principalibus 6, spinis distantibus elongatis, leviter arcuatis; interstitiis costis tribus spinis acutissimis triseriatis ornatis.

In this species, which grows much more freely than any other, the point of attachment is scarcely perceptible, and the cardinal area is very narrow. The shell is more depressed than *S. regius*. The long spines on the six principal ribs are not so erect, nor the interstitial ribs so numerous as in *S. regius*. There are three between each principal rib, beautifully ornamented by spines curved outwards. Towards the margin there is a row of smaller spines on each side of the larger ones. The usual colour is reddish fawn between the ribs, and on the ends of the long spines, while the six principal ribs are white. From China. The white variety, fig. 43, is in the collection of Mr. Cuming.

17. SPONDYLUS ARMATUS (pl. lxxxix. f. 53.), *nobis*.

S. testâ ovali, pallidè fulvâ; costis principalibus quinque, spinis rectis, longissimis, extantibus, interstitiis lævibus, aculeis parvis in seriem dispositis.

The description is taken from a single valve in the British museum, having five slightly raised ribs, with three or four very long straight spines on each, some of which exceed the shell in length. Between the ribs there are a few very small spines. The rest of the shell is smooth.

18. SPONDYLUS REGIUS (pl. lxxxvii. f. 30.), *Gmel.* no. 2.

S. testâ regulari, ovali; areâ cardinali parvâ; costis 6 principalibus, imbricatis; spinis elongatis, distantibus, erectis, ad terminos subcomplanatis; interstitiis costis numerosis, imbricatis.

This species generally grows freely, and is consequently regular in form, and has a small cardinal area. The six principal ribs are each armed with five or six long, straight spines, which are slightly flattened at the termination. The interstices have numerous sharply imbricated smooth ribs. The colour is of a reddish-brown between the ribs, and on the points of the spines; a white variety is represented in Chénu's '*Illust. conch.*'

From the Sooloo Islands, H. Cuming.

19. SPONDYLUS CUMINGII (pl. lxxxix. f. 62.), *nobis*.

*S. testâ regulari, subrotundatâ, subdepressâ; areâ cardinali parvâ; costis principalibus 6, elevatis, lævibus; squamis subelongatis, lævibus, arcuatis, palmatis, ad latera palmarum undulatum fimbriatis; interstitiis imbricatim striatis; colore fusco-rubescente.*

A free growing species, like *S. regius* and *S. imperialis*, with a short cardinal area, of an uniform purplish-brown tint, with six principal ribs, ornamented by arched palmated scales, the sides and ends of which are frilled and fluted. The interstices are filled with numerous imbricated ribs. In Mr. Cuming's collection. From the Island of Java.

20. SPONDYLUS VARIEGATUS (pl. lxxxv. f. 14, 15.), *Lam., Anim. s. vert. vol. vi. f. 189.*

*S. testâ rotundato-ovali, auriculis subquadratis, costis 6 principalibus; spinis obtusis, rectiusculis, distantibus; interstitiis bicostatis, bisulcatis; colore interstitiarum per lineis angulatis disposito, prope umbones maculato et variegato.*

The five or six principal ribs are characterized by straight, erect, thick and blunt spines, the interstitial ribs and grooves seldom present spines or imbrications. The colour is dark variegated brown, and sharp angulated lines, upon a nearly white ground, between the ribs. The pale pinkish variety represented by fig. 14, is in the collection of M. Gruner; the typical specimen, fig. 15, is from Amboyna.

21. SPONDYLUS LAMARCKII (pl. lxxxv. f. 20. pl. lxxxix. f. 63.), *Chenu, Illust. conch. pl. 9. f. 4. p. 6. S. ducalis, var., Lam. S. spathuliferus, Lam. (?) Chemnitz fig. 474, 475.*

*S. testâ ovali depressâ, lævi, vel læviter striatâ, purpureo vel fusco variegatâ; margine interiori purpureo; cardine fusco; costis principalibus 6, squamis erectiusculis, tenuis, distantibus, complanatis, lævibus; variat squamis nullis, irregulariter costatâ.*

Shell oval, rather depressed, smooth, or very slightly striated, purple, variegated with white, with a strong band of dark purple in the interior; hinge dark brown; six ribs, with distant, thin, smooth, arched, palmated scales, which in some specimens are obsolete. This species differs from *S. ducalis* (if really distinct) in the absence of the well-defined grey stripes, and in the smoothness of the interstices. We are informed that Lamarck considered it as a variety of Chemnitz's *S. ducalis*, and Chenu has accordingly figured it as such, in his plates; but he has subsequently given to



it the above name, which is here, with some hesitation, adopted. The younger shell, figured in Plate lxxxix, is certainly the same as Chemnitz's Plate xlvii. fig. 474, 475, referred to by Lamarck as *S. spathuliferus*, but differs entirely from those which he has so named in his own collection.

22. SPONDYLUS DUCALIS (pl. lxxxv. f. 16.), *Chemn. t. 7. pl. xlvii. f. 477, 478.*

*S. testâ ovali, griseo lineatâ, prope umbonem variegatâ, cardine et auriculis magnis; costis 9 ad 10, vix elevatis, albis; squamis subarcuatis, palmatis, plerumque distantibus; interstitiis striatis.*

Of an oval form, with broad auricles stripped with dark grey, and rather variegated at the apex. There are nine or ten ribs with short, white, palmated, slightly arched scales. In many specimens, however, the scales are nearly obsolete. The grey stripes between the rows of scales form a rather strongly marked character, in this species, and distinguish it from *S. Lamarckii*.

Locality, "Indian Seas," Lamarck. Philippines, H. Cuming.

23. SPONDYLUS FRAGILIS (pl. lxxxix. f. 57.), *nobis.*

*S. testâ tenui, ovali, tenuissimè striatâ, auriculis parvis; squamis erectis, tenuis, numerosis, palmatis, subdivisis, per series 6 principalibus (alternis minoribus), aculeatis dispositis; interstitiis imbricatis; colore palidissimè fulvo, prope umbonem maculis fuscis interruptim radiato, ad interstitias punctato, ad squamas roseo tincto; valvâ inferiori aculeatâ, inter spinas scabriculâ.*

Much thinner than the thinnest varieties of *S. ducalis*, and having much smaller auricles. The scales are also much thinner and more gracefully elongated than in that species. The interstices are finely imbricated. The colour is arranged near the apex in radiating rows of dark angular patches, which near the margin, are subdivided into minute dots. Mr. Sowerby, sen., possesses two specimens of this elegant shell, the locality of which is unknown.

24. SPONDYLUS VARIANS (pl. lxxxvi. f. 21, 22.), *Sowerby, Appendix to Catalogue of Polynesian shells collected by Mr. Sam. Stutchbury, p. 1. Owen, Article on the 'Water-clam', in Mag. of Natural History, new series, 1838. Spondylus Delessertii, Chenu. Illust. conch. pl. xii. Test. junior, S. obliquus, Chenu. Illust. conch. p. 7. pl. xxiv. f. 5.*

*S. testâ ponderosâ, minimè liberâ, plerumque ad umbonem rubrâ; areâ cardinali plerumque elongatâ, fusco fasciatâ; valvâ inferiori concameratâ. Testâ juniori lævi, triangulari, costis distantibus, noduliferis radiatâ. Testâ maturâ maximâ, ovali, plerumque squamis lingularibus, lævibus, depressiusculis, ornatâ.*

From the circumstance of water being retained between the laminæ of the shell in old specimens, this has commonly been called the "*Water Spondylus*." The young is of a three-cornered shape, smooth, and of an orange or purple colour, with five or six beaded ribs, and a very elongated area. The age to which this form is retained, depends partly upon the period at which the lower valve becomes free. The full-grown shell is oval, generally white, except at the umbones, and has numerous long, rather flattened and depressed spathulæ.

This species was first decided by Mr. Sowerby, Sen., after a comparison of the various ages and forms exhibited in the beautiful series of specimens brought from the Polynesian Islands by Mr. S. Stutchbury.

25. SPONDYLUS LIMBATUS (pl. lxxxviii. f. 51.), *Sowerby, Jun., Proc. Zool. Soc. May, 1847.*

*S. testâ ovali, vix costatâ, squamis depressis, lævibus, palmatis, brevibus, in seriebus irregularibus, inæqualibus 6 ad 11 dispositis; interstitiis minutissimè striatis; cardine magno; colore squamarum croceo, interstitiarum obscurè violaceo, intùs limbo purpureo.*

The specimen figured is in the collection of M. Gruner, and there is also another fine specimen in the British Museum. The shell is of a loose texture, with seven or eight rows of smooth, flattened scales, of a brownish orange colour. The interstices are obscurely ribbed, with occasional imbrications, and are of a dull purple colour; which colour constituting the principal pigment, is shewn in a broad, bright, purple band round the border of the interior. The hinge-teeth are remarkably large. M. Gruner, G. B. Sowerby, Sen., and the British Museum have specimens from the Persian Gulf.

26. SPONDYLUS SINENSIS (pl. lxxxvii. f. 32, 33, 34.), *nobis.*

*S. testâ lævi elongato-ovali, areâ cardinali plerumque elongatâ; costis 5 ad 7 principalibus, vix elevatis, squamis lævibus, depressis, palmatis; interstitiis lævibus, costis inæqualibus et squamis minoribus; colore pallidè fulvo vel roseo vel albo, prope umbonem fusco variegato.*

Remarkable for the smooth, depressed, palmated, spoon-shaped scales, on the five or seven principal ribs, which are repeated in miniature in the interstices.

From China.

27. SPONDYLUS AURANTIUS (pl. lxxxiv. f. 1, 2. pl. lxxxix. f. 55.), *Lam. Anim. s. vert.* vol. vi. p. 192. an Test. jun. *S. radians*, *Lam. S. Nicobaricus*, *nonnul?*

*S. testâ ovali, tenui; spinis extantibus subdistantibus subarcuatis angustis per series 15 ad 18 dispositis; interstitiis lævibus; colore spinarum aurantio, inter spinas flavido-rubescente, ad umbonem albo, nigro vel rubro variegato, cardine fusco fasciato. Variat valvâ superiori albo, nigro radiatim variegato. Variat quoque fusco, subtus croceo.*

The spines of this species are slender, rather distant from each other, a little curved and sharp pointed. They are arranged in from ten to twenty rows. The interstices are smooth. The colour is, as the name implies, orange, which is ribbed with red between the spines, while the apex, which is white, with short spines and presenting those dark spots which form the characteristic of *S. Nicobaricus*. A variety coloured uniformly with dark orange-brown, and another with the upper valve white, are of frequent occurrence. Mr. Cuming has the white variety from the Philippines. The greater part of the specimens are from the Sechelle Islands.

28. SPONDYLUS NICOBARICUS (pl. lxxxviii. f. 48.), *Chemn.* vol. vii. t. 45. f. 469, 470. *S. regius*, *Lam. Anim. s. vert.* vol. vi. p. 192.

*S. testâ ovali, tenui; costis vix elevatis numerosis, spinis brevibus, tenuis, subtus concavis ornatis; interstitiis striatis; per series macularum nigrarum vel rubrum radiatim disposito; variat purpureo, prope umbones rubro radiatim maculato.*

The spines above the slightly elevated; the numerous ribs are short, and in fine specimens, sharply pointed. The interstices are striated. The colour is arranged in radiating rows of dark angular spots, upon a white ground.

The specimen figured is from Bureas, and we have other specimens from the Mauritius. Although the character of this shell presents a suspicious resemblance to that of the umbo of *S. aurantius* and *S. zonalis*, yet we do not observe, in its approach towards maturity any disposition in the spines to assume the form by

which those species are distinguished; we therefore admit the species, but not without an impression that it may possibly be only the young state of those mentioned above.

29. SPONDYLUS CILIATUS (pl. lxxxix. f. 52.), *nobis*. *S. aculeatus*, *Brod. Proc. Zool. Soc.*, 1833, p. 5.

*S. testâ parvâ, rotundatâ, subdepressâ, albâ: spinis aculeatis subrecurvis, frequentibus, gracilibus horridâ; interstitiis minutissimè aculeatis.*

A small, thin, rounded shell, crowded with long gracefully curved, extremely slender spines. It is necessary to give a new name to it, in consequence of the name *S. "aculeatus,"* having been previously applied to another species by Chemnitz.

From Lord Hood's Islands, in the Pacific Ocean. It was found by Mr. Cuming attached to a piece of coral on the reefs.

30. SPONDYLUS ZONALIS (pl. lxxxv. f. 12, 18. pl. lxxxvi. f. 27. pl. lxxxix. f. 60.), *Lam. Anim. s. vert.* 6. v. i. p. 183. *Chenu. pl. vii. f. 3, 4. S. Herinaceus, Chenu. Illust. conch. pl. xxv. f. 3, 4. p. 6.*

*S. testâ ovali, tenui; costis vix elevatis 20 ad 23, spinis subnumerosis, subdepressis, plerumque truncatis, interstitiis lævibus; colore fusco purpurascente, inter spinas fasciatim disposito, umbone albo, nigro radiatim maculato.*

The species nearly resembles *S. aurantius*, but the spines, or rather scales, are more numerous, and generally flattened at the termination. The interstices are smooth. The umbo is white, spotted with black, as in *S. aurantius* and *S. Nicobaricus*, and the colour, which is generally purple, is arranged in ribands between the spines. We had thought of separating the shell represented by fig. 18, under a new name, and also of admitting Chenu's *S. herinaceus* to be distinct, but the shell figured (no. 27), presents in the central part, the usual character of *S. zonalis*, near the margin on the left-hand side, it has the short yellow scales upon a dark purple ground, for which fig. 18, is remarkable, and on the right-hand side, the spines which characterize *S. herinaceus*; thus combining the whole.

From the Mauritius, Torres Straits; Mr. Cuming has them from Isles Ticao, and Minodro, Philippines.

31. SPONDYLUS CANDIDUS (pl. lxxiv. f. 3, 4, 5.), *Lam. Hist. nat. anim. s. vert. vol. vi. p. 188.*



*S. testâ albâ*; costis numerosis, inequalibus, angulatis, moniliferis, nonnunquam rubris; interstitiis striatis.

The ribs are numerous, unequal, angular, with little raised bead-like notches, which in some specimens are of bright scarlet colour. We had doubtfully identified this species from the very slender materials afforded by Lamarck's description, previously to seeing Chenù's figure of Lamarck's shell confirming our view.

Mr. Cuming's specimens are from Lord Hood's Island.

32. SPONDYLUS NUDUS (pl. lxxxviii. f. 39, 40.), *Chemn.* vol. ii. p. 235. pl. 203. f. 1989, 1990.

*S. testâ subtriangulari imbricatim striata*; auriculis parvis; areâ cardinali elongatâ; costis 6 albis, parvis, numerosis, minutissimè noduliferis; colore rubro. Variat albo, rubro radiatim striato.

A small solid species, with narrow auricles and lengthened cardinal area, covered with minute beaded ribs. The colour is red, with six or seven of the principal ribs white; it also occurs white, broadly striped with red.

The former variety is from the Red Sea, the latter is from the Phillipine Islands.

33. SPONDYLUS GUSSONI (pl. lxxxix. f. 54.), *Costa*, Philippi, Enum. Mollusc. Sicil. vol. i. p. 87. *S. minimus*, *Chenu*, Illust. conch. ? *S. albus*, B. M. *S. albidus*, *Brod. Proc. Zool. Soc.* 1836, p. 43.

*S. testâ parvâ, tenui, ovali, striatâ, albâ*; striis minutissimè imbricatis.

A small, thin, white, oval, minutely striated shell, with the striæ minutely imbricated. We cannot perceive the difference between this shell and *S. minimus* of Chenu, or the one named *S. albus* in the British museum.

From the Mediterranean.

34. SPONDYLUS COCCINEUS (pl. lxxxviii. f. 47.), *Lam., Anim.* s. vert. vol. vi. p. 190.

*S. testâ purpureâ, prope umbones radiatim rubro variegatâ*; costis vix elevatis, numerosis; spinis inæqualibus, brevibus validis.

The distinction between this species and the variety of *S. spathuliferus* most nearly resembling it (fig. 61), is that the former is covered by numerous short *spines*, while the *spathulæ* of the latter are less numerous and more distant. It is uncertain whether fig. 56, which at p. 419 is included as a variety of *S. longitudi-*

*nalis*, may be an undeveloped specimen of that species, or of *S. coccineus*. Fig. 24 may probably be referred to this species.

#### SPECIES NOT IDENTIFIED.

35. *S. AMBIGUUS*, *Chénu*, *Illust. conch.*, pl. xxviii. f. 1.

"T. inæquivalvi, superiore fuscâ; inferiore croceâ radiato-costatâ et spinosâ."

Very probably a variety of *S. zonalis*, but possibly distinct. America.

36. *S. ASIATICUS*, *Chénu*, *Illust. conch.* pl. xxiv. f. 1, 2.

"T. inæquivalvi, cinereo vel fuscâ violascenti, longitudinaliter costatâ et spinosâ, spinis squamosis truncatis."

This I suppose to be new, but both the specimens figured are covered with extraneous matter.

37. *S. EXCAVATUS*, *Chénu*, *Illust. conch.* pl. xxix. f. 2.

"T. inæquivalvi, utrinque violaceo-muticâ; costis 9 longitudinalibus, et costis 6-7 ad interstitia."

Possibly a worn and undeveloped specimen of *S. Cumingii*.

38. *S. GRACILIS*, *Chénu*, *Illust. conch.* p. xxvi. f. 1.

"T. albâ, multicostatâ, et tenuiter spinosâ, costis intermediis minoribus spinosisque; intus albâ, ad limbum roseâ."

A small white shell, rather resembling *S. candidus*, Lamarek.

39. *S. LIMA*, *Chénu*, *Illust. conch.* p. 6. pl. xxiv. f. 7.

"T. violaceâ albido-maculosâ, fusco zonatâ; multicostatâ et spinosâ; costis minimis approximatis, spinis tenuissimis."

"Cette espèce est fort voisin du *S. radius*, mais elle en diffère par la régularité de ces cotes toutes égales, par la ténuité des épines, et l'uniformité de sa coloration."

40. *S. ROSTRATUS*, *Chénu*, *Illust. conch.* pl. xxvi. f. 4.

"T. inæquivalvi, albidâ, violaceo-maculatâ, longitudinaliter minimè striatâ; costis 10-majoribus; valvâ inferiori ventricosâ; areâ cardinali maximâ, curvatâ; intus albida."

## SPONDYLUS.

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Half the natural diameter. The figure after each is the number of the species.

- |           |                                     |         |                                       |
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|           | 20. — <i>Lamarckii</i> , 21.        |         | 51. — <i>limbatus</i> , 25.           |
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|           | 24. — <i>spathuliferus</i> , 11.    |         | 54. — <i>Gussoni</i> , 33.            |
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|           | <i>seu coccineus</i> , var. ?       |         | 56. — <i>longitudinalis</i> , var. 6. |
|           | 26. — <i>spathuliferus</i> , 11.    |         | <i>seu coccineus</i> , var. ?         |
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## MONOGRAPH OF THE GENUS

### PLICATULA.

*Class*, Conchifera.    *Order*, Monomyaria.    *Fam.*, Pectinides.

*Gen. Char.* "Testa inæquivalvis, inarticulata, basi (*apex*) attenuata; margine supero (*ventral*) rotundato, subplicato; natibus inæqualibus; areis externis nullis. Cardo dentibus duo validis in utrâque valvâ. Fovea intermedia ligamentum penitus internum recipiens." *Lamarck*.

The *Plicatulae* are irregular, attached, bivalve shells, with one muscular impression, and two teeth, locking into corresponding hollows in each valve. In the attached valve, there is an external triangular area at the hinge, but the ligament cartilage in both valves is internal, being placed in a cicatrix between the teeth. All the species are, when freely developed, somewhat triangular in form, and plicated; but when fixed by a large portion of their surface they lose their plicated character, and take the form of substances to which they are attached, the plication only commencing when the shell begins to grow freely.

Between species so nearly resembling each other in their deformities, as well as in their regular characters, it is impossible to distinguish with certainty by any permanent characters. All we undertake to do is to give a general account of the distinctions sought to be established by others.

1. *PLICATULA RAMOSA* (pl. xc. f. 1 to 4.), *Lam. Anim. s. vert.* vol. vi. p. 184. *Plicatula gibbosa*, *ibid.* *Spondylus plicatus*, *Linn. Gmel.* p. 3298.

*P. testâ solidâ, crassâ; plicis subrotundatis, geminatis; colore pallidè fulvo, plicis lineis brevibus griseis vel rubris ornatis.*

The shell is solid; the plicæ are rounded, of average number, and repeatedly doubled so as to branch out towards the margin. The colour is arranged in short grey or red lines, on the top of the folds. Lamarck gives America as the locality. Fig 4 is from a specimen belonging to Mr. Cuming, from Lord Hood's Island.

2. *PLICATULA CRISTATA* (pl. xc. f. 8.), *Lam. Anim. s. vert.* vol. vi. p. 185. *P. reniformis*, *Lam.*, inclusa, *D'Orb.*

*P. testâ solidâ*; plicis paucis, magnis, angulatis, ad angulos fuscis, ad latera rubro-lineatis. Variat testâ albâ.

Having the plicæ larger, more angular, and less numerous than *P. ramosa*, and not generally divided, as in that species. Mr. Dyson has brought a white variety from Honduras Bay; Mr. Adams has collected the ordinary variety at Jamaica.

3. *PLICATULA DEPRESSA* (pl. xc. f. 7.), *Lam. Anim. s. vert.* vol. vi. p. 185.

*P. testâ solidâ*, plicis numerosis, raro divisis; colore per lineas et punctas disposito.

The folds are much more numerous than in the other species, and very few of them divided. The flatness from which the species is named, is merely an accident in the specimen.

4. *PLICATULA AUSTRALIS* (pl. xci. f. 20 to 22.), *Lam. Anim. s. vert.* vol. vi. p. 185.

*P. testâ tenui*, subrotundatâ, depressâ, nigro punctatâ; plicis parvis, irregulariter ramosis, imbricatis, interruptis.

The slightly raised ribs are irregularly branched, and occasionally interrupted by turned up points. The shell is generally spotted with black, but it occurs smooth, and without spots. The form is not so angular as in other species.

From Australia, *Lamarck*. Philippines, *Cuming*.

5. *PLICATULA PHILIPPINARUM* (pl. xc. f. 5? 9, 10, 11, 13, 14. p. xci. f. 23?) *Hanley*, Recent Shells.

*P. testâ solidâ*, rubro vel nigro lineatâ, plicis magnis, continuis, angulatis, raro divisis, angulis subimbricatis.

This species has large, angular plicæ, more numerous than in *P. cristata*, and generally imbricated at the angles. The lines of colour are longer. In the shells represented by figures 9, 10 and 11, no part of the surface is plicated, because no part has grown freely. In fig. 23, the ribs and even the lines of growth in the area to which the lower valve is attached, is shown distinctly on the outside of the upper valve.

Collected by Mr. Cuming in the Philippine Islands.

6. *PLICATULA IMBRICATA* (pl. xc. f. 6. pl. xci. f. 15 to 18.),  
*Menke*, Moll. Nov. Hollandiæ, p. 35.

*P. testâ subfoliaceâ, plicis angulatis, magnis, alternatim divisis, ad angulos foliis extantibus fornicatis, imbricatis; colore fulvo, lineis rubris. Variat fusco, et albo, lineis nullis.*

The folds are angular, with foliaceous vaulted imbrications, the average form and number of which are shown in fig. 18. Fig. 6 is extreme specimen with which we are favoured by Mr. Hanley. Fig. 15, 16 represent the Chinese variety. Fig. 17 is of a specimen collected at the Bay of Manila, Island of Corregidor, by Mr. Cuming. The var. fig. 18 was collected by Mr. David Dyson at Honduras Bay.

7. *PLICATULA DUBIA* (pl. xc. f. 12? pl. xci. f. 19. *Hanley*, Recent Shells.

*P. testâ tenui, foliaceâ, depressâ subrotundatâ; plicis brevibus, interruptis, irregularibus, foliis extantibus fornicatis truncatis non-nullis; colore fusco rubescente, fusco maculato, prope umbones punctato.*

Similar to *P. australis*, but with the interrupted plicæ more irregular, and fewer in number, with occasional upturned vaulted ends.

Collected by Mr. Cuming at the Island of Samar, and at the Island of Cana, West Columbia.

#### LIST OF FIGURES IN PLATES XC. AND XCI.

- Fig.  
 1 to 4. *P. ramosa*, sp. 1. (*P. gibbosa*, Genera of Shells.)  
     5. — *Philippinarum*, var. sp. 5.  
     6. — *imbricata*, 6.  
     7. — *depressa*, 3.  
     8. — *cristata*, 2.  
 9 to 11. — *Philippinarum*, 5.  
     12. — *dubia*, var. (?) sp. 7.  
     13, 14. — *Philippinarum*, 5.  
 15 to 18. — *imbricata*, 6.  
     19. — *dubia*, 7.  
 20 to 22. — *australis*, 4.  
     23. — *Philippinarum*, var. (?) sp. 5.



## MONOGRAPH OF THE GENUS PEDUM.

*Class*, Conchifera.    *Order*, Monomyaria.    *Fam.*, Pectinides.

*Gen. Char.* "Testa inæquivalvis, subauriculata; valvâ inferiori hianti; natibus inæqualibus, divaricatis. Cardo edentulus. Ligamentum partim externum, in fossulâ canaliformi natium pariete internâ affixum. Valvâ inferior prope basin posticam emarginata."

Inequivalve, foliaceous, attached by a byssus passing through an opening in the side of the lower valve. Hinge with a triangular area in each valve, that of the attached valve considerably largest. Ligament on the area, and the elastic cartilage in a groove in the centre of the area, terminating in the interior.

PEDUM SPONDYLOIDEUM (pl. xci. f. 1 to 4.), *Lam. Anim. s. vert.* vol. vi. p. 154. *Ostræa Spondyloidea*, *Gmel.* no. 109.

P. testâ cuneiformi, depressâ, imbricatim striatâ, valvæ inferioris areâ cardinali magnâ, lateribus reflexis; colore fulvo, purpureo nigrescente marginato. Variat albo.

Wedge-shaped, flat, with the sides of the lower valve turned upwards, and the surface striated with rows of raised points. The young (fig. 2) is much shorter in proportion than the full-grown shell. The smoothness of var. f. 4 is accidental.

From the Isle of France.

### PLATE XCI.

Fig. 1. *Pedum Spondyloideum*.

2. The same, young.

3. White variety.

4. Smooth variety.

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